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ABSTRACT

Cooperative learning strategies are used to facilitate the integration of multicultural and multi-ability level students into California regular education classrooms. This handbook is a sampling of innovative lesson plans using cooperative learning activities developed by teachers to incorporate the core curriculum into their instruction. Three papers introduce the cooperative learning process and give guidelines for its implementation. Twenty-seven lesson plans are then presented, with each plan outlining grade level (K-12), necessary materials, and procedures for setting the lesson, conducting the lesson, monitoring and processing, and evaluating the lesson. In the language arts/reading area, lesson plans include: "Show and Tell," "We'd Rather," "The Goop," "Brothers Grimm Fairy Tales," "Jobs, Jobs, Jobs," "Facts in Fives," "Identifying Denial," "Writing Complete Simple Sentences," and "Garden Plot." Math/science lesson plans are titled "Let Me Count the Ways," "Gummy Bears," "Beansticks," "Magnets," "Are You a Square?" "Places on the Tongue," "Teddy Bear Math," "Volcanoes," and "Take Me to Your Liter." History/social science lesson plans cover "Our United States," "Exploring the Continents," "Political Cartoons," "Buying American," and "The 1920's." A miscellaneous category includes "Santa Claus," "Roses Are Red," "Family Squares Game," and an overview of cooperative learning for parents and teachers. Four excerpts from published works, one concerning competition and the others concerning aspects of cooperative and group learning, conclude the handbook. A list of contributors, an index by grade level, and a list of additional resource materials are appended. (JDD)

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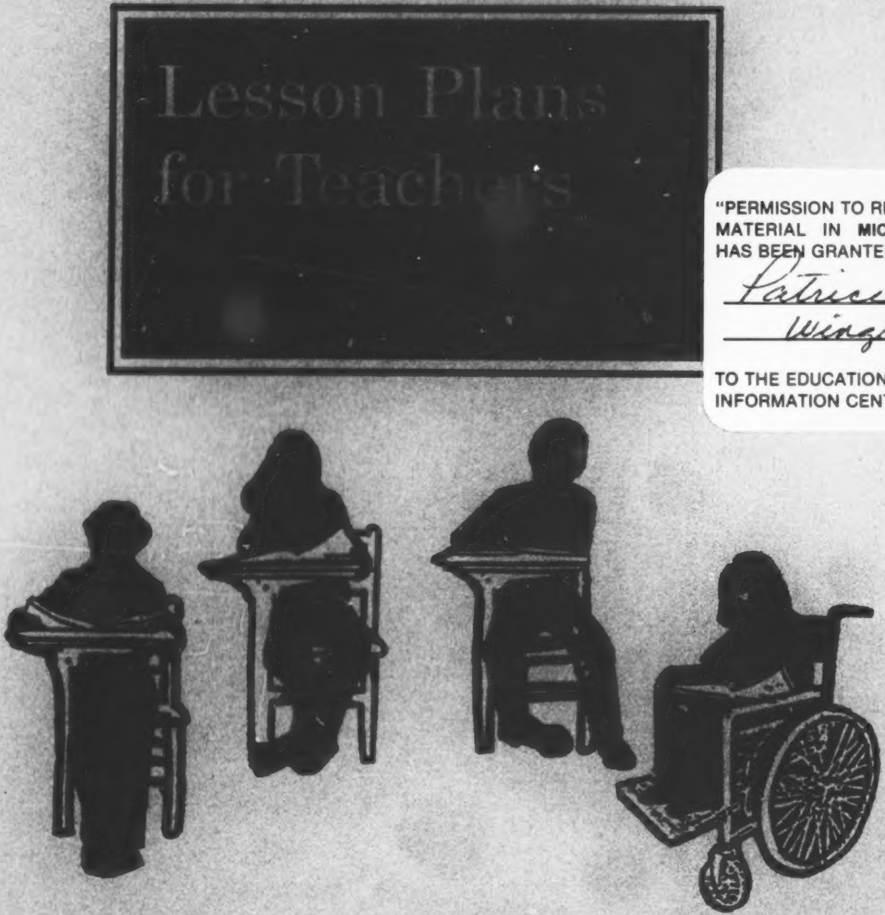
Integrating the Core Curriculum Through Cooperative Learning



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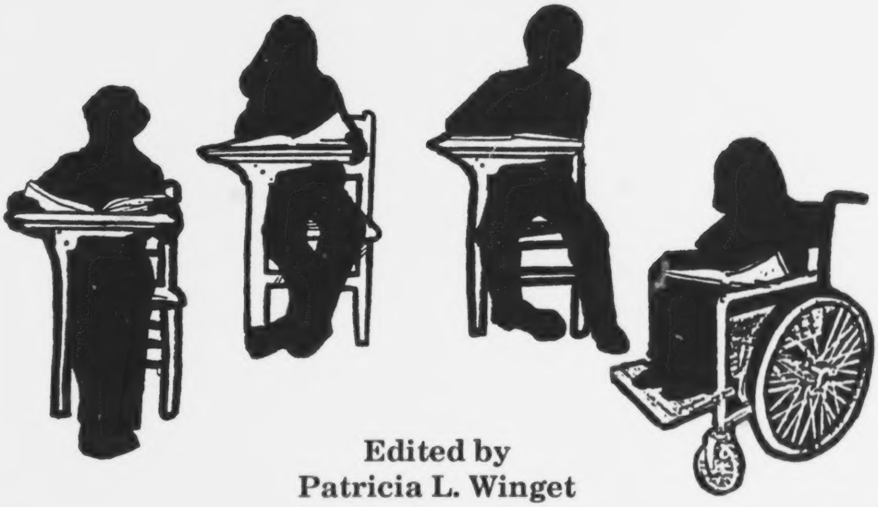
Integrating the Core Curriculum Through Cooperative Learning

Lesson Plans for Teachers



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and support in developing this handbook:

All contributors of lesson plans.

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Patricia L. Winget
Resources in Special Education

Foreward

by
Patrick Campbell
Director, Special Education Division
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California's best. This handbook is a sampling of the innovative instruction taking place in classrooms throughout the state. These outstanding lesson plans represent models of Cooperative Learning activities that creative California teachers have developed to integrate the core curriculum into their classrooms. Out of the hundreds of Cooperative Learning lesson plans submitted, these were selected as California's best.

As teachers and administrators of regular, special, and bilingual education programs grapple to meet the varied needs of all their students, the instructional strategies of Cooperative Learning have proven effective in producing both cognitive and affective gains for regular education students as well as students with special needs. Research has supported that Cooperative Learning activities do indeed promote:

- Academic and cognitive skills
- Social skills
- Self esteem
- Improved attitude toward peers
- Improved attitude toward school
- Improved attitude toward authority figures.

And, when students are taught the social skills needed to accomplish the cooperative task, students in Cooperative Learning settings generally exceed the success of students in competitive or individualistic classroom settings.

The Special Education Resource Network (SERN) took a leading role in the promoting of Cooperative Learning throughout California. During the last six years, SERN worked with numerous educational agencies training cadres of regular, special, and bilingual education teachers and trainers in Cooperative Learning techniques. Today, thousands of California teachers trained in these techniques are applying their skills in the classroom and/or training their peers. What you see in this handbook is evidence of the excellent training SERN Educational Specialists provided.

Use this handbook as a "jumping off" place to incorporating Cooperative Learning into your classroom. It is a compilation of creative teaching strategies that will help all students achieve academic goals in all core curriculum areas. These are lessons that have been proven effective by outstanding California educators - ***California's best.***

Good luck!

Preface

California's student body is a highly varied population. Nearly 200 languages are spoken by Limited English Proficient students in our schools. Integrated with their peers in regular education classrooms are students with disabilities including visual, hearing, and orthopedic impairments, learning disabilities, and other neurological disorders. And thousands of California students have been identified as "high risk" for educational failure.

All of these students must be taught California's core curriculum and, to the extent it is appropriate, in the regular education classroom. But how?

Through Cooperative Learning strategies. Cooperative Learning has been found to be highly successful in facilitating the integration of multicultural and multiability level students into the regular education classroom (Johnson and Johnson, 1984; Johnson, Johnson, and Maruyama, 1983; Sharan, 1980; Sharan, et.al., 1980). Cooperative Learning has also proven to be an effective instructional tool in improving academic and cognitive skills (Slavin, 1986; Kagan, et.al., 1985; Johnson and Johnson, 1983).

Cooperative Learning, as opposed to traditional competitive and individualistic classroom settings, has demonstrated social benefits as well:

- Specific social skills are taught to students.
- Students learn to monitor their own behavior.
- Students become responsible for each other's learning.
- Students get to know other students outside their clique.

Research has demonstrated that Cooperative Learning is effective, not only academically, but also socially, in the developing of improved student attitudes toward themselves, their peers, their school, and authority figures (Johnson and Johnson, 1985; Slavin, 1983).

The Special Education Resource Network (SERN) promoted the training of teachers and administrators throughout California in Cooperative Learning instructional strategies during the past six years. This long term SERN commitment has included long range planning, intensive training sessions, coaching and technical assistance, and active, administrative support. The overwhemingly positive response to SERN's Cooperative Learning training efforts led to the creation of the Cooperative Learning Task Force in 1984.

This handbook of model Cooperative Learning lesson plans is an outgrowth of that task force. The trainers and implementors of Cooperative Learning that sat on the task force wanted to:

1) Share examples of real, working Cooperative Learning lessons done in real classrooms in California, and

2) To acknowledge the work and efforts of these outstanding teachers.

So in the fall of 1986, a call went out to all teachers, trainers, and administrators in California to submit their best lesson plan using Cooperative Learning strategies to integrate the core curriculum into their classroom. Hundreds of California educators responded.

The 27 lesson plans that are published in this handbook were selected on the following criteria:

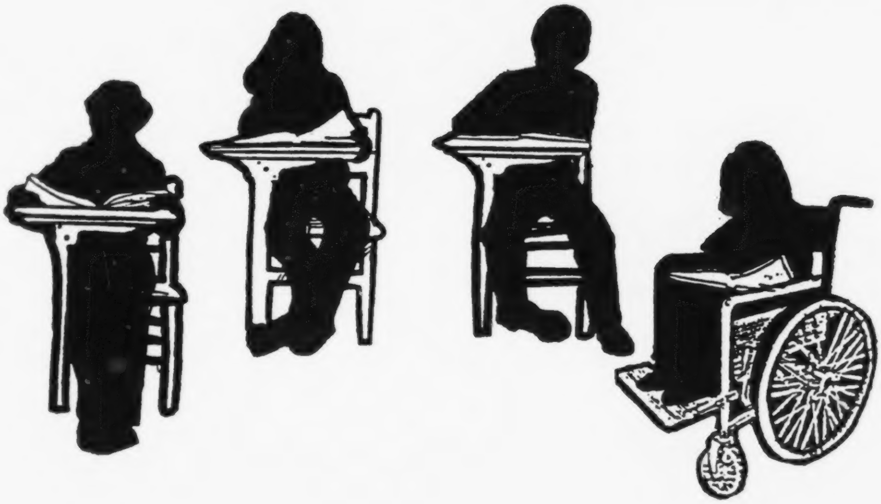
- Effective use of Cooperative Learning strategies
- Submitted in the appropriate lesson plan format (incorporating the teaching of a social skill within the activity)
- Lesson addresses the core curriculum
- Innovativeness of lesson or strategy
- Insightful evaluation of lesson outcomes
- Successful inclusion of "high risk," bilingual, or special education students into lesson.

We hope you find these lesson plans helpful. Use them, adapt them, be inspired to write your own! Let us hear what you are doing at your school site. And, as curriculum development and Cooperative Learning are dynamic, ongoing processes, so is this handbook. Fine-tune your best Cooperative Learning lesson and submit it to us. We'd love to list you as an author of our next handbook!

Good luck!

Cooperative Learning Lesson Plans

Introduction



First Experiences With Cooperative Learning

by
Greg Houts
Fifth Grade Teacher
Corning, CA

As a regular education teacher with a long term interest in children with special learning needs, I've been a strong supporter of mainstreaming children out of our special education programs.

When talking with Becky Preble, the special day class teacher at our school, we discovered that we were both ready to do a unit on volcanoes and platetectonics. We both jumped at the thought of combining our classes, knowledge, and talents in a Cooperative Learning environment. The term Cooperative Learning was new to me, though the concept wasn't. Becky explained the Cooperative Learning mode of teaching in detail. And her enthusiasm for it set the tone for one of the most exciting and revealing units I've ever taught.

The first day of Cooperative Learning, the students of both classrooms were very nervous and unsure of working together. That first day, the children learned about their group responsibilities within the Cooperative Learning mode and received their assignments. The teachers floated from group to group to watch, aid, and keep track of the Cooperative Learning going on, or not going on, in the different groups. In evaluating that first day, the children seemed to be falling into three categories. We had the "I'm the boss" types, the "I'll just sit here and do nothing" types, and the third were those who really wanted to be a successful part of a Cooperative Learning environment.

When the children were given the opportunity to evaluate and express their feelings concerning their first day of Cooperative Learning, there were a lot of negative feelings expressed in most of the groups. The positive responses, however, were picked up and were used as a basis to work out group problems. (We held meetings at the end of each period for the first week, and whenever we felt the tone warranted the need for these evaluation meetings.) The positive awareness enabled the students, who were having a difficult time, to become aware that their peers had expectations of them, and wanted and expected everyone to participate in a Cooperative Learning mode. Inevitably, these sessions led to better Cooperative Learning interactions and promoted the whole learning process, especially for, but not only for, the special education children. The amount of information learned about volcanoes and platetectonics by all the students was amazing. The very lowest were given specific goals during the testing, i.e. name and draw the four different types of volcanoes. These three students can also tell you about magma and lava, and they can draw the four types of volcanoes very well and tell about the differences each has. Our goals for the rest of the class was a basic understanding of how, where, and why volcanoes occur. The students have achieved way beyond my goals and expectations, both academically and socially. Their enthusiasm for learning has intensified as they see that they learn more from each other, and they've learned that they all have something to offer each other. They've shared that their opinions and participation is desired by the rest of the group members and the class.

Not only has Cooperative Learning benefitted the regular education program beyond my expectations, but the growth of the special education children has really been tremendous. Specifically, a group that had three regular education children and two special education children helped each other become a successful, working group. Nancy, a high achiever, was part of this group. She was an "I'll do it" person, but she was striving to achieve the goals concerning Cooperative Learning. Nancy was allowed to voice her feelings in the meeting. She was feeling very frustrated. She felt that the other two regular education students did not participate properly and were unconcerned with the whole Cooperative Learning process and the assignment. She was also very frustrated by one of the special education students who had no social skills, and who physically turned her back on the group and would not participate. This special education student had no positive self-esteem and would constantly, in all classroom situations, withdraw. The group first discussed how they could help strengthen their group and thus strengthen their final product. Each individual had a chance to tell how they could best help achieve their group's goals. The class also had suggestions to offer Nancy's group and were able to share experiences similar that each group had worked out.

Through various methods and much patience, this special education child has become a contributing part of every group she is a member of, and more importantly, she is exiting the special education program. Is she exiting a special day class program because of Cooperative Learning? Well, **here's 40 students and 2 teachers that believe that this child would not be exiting a special class had Cooperative Learning not been a part of her school environment, and given the chance to feel worth with regular education students.** The boys in this group have turned into responsible group members, and are participating in the classroom.

This child, along with all of the others in the classes, have learned better socializing skills. They have learned how to solve personality problems themselves without having to rely on adult interventions. They enjoy challenging one another with new information that they have researched or have gotten from the news media. They show an awakening to the fact that they can "teach" and learn from others, not just from the teacher. Perhaps, one of the greatest effects of Cooperative Learning is how sensitive and caring the students have become with one another and their problems.

Cooperative Learning has a definite positive snowballing effect and dividends that just keep getting larger and larger. As a whole the classroom has become a much harder working, caring, and more positive environment that the children have created for themselves through Cooperative Learning.

Implementing Cooperative Learning: The Teacher's Role

by
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University of Minnesota

What do teachers need to know in order to use Cooperative Learning groups effectively? One thing is clear. A prepackaged program will not work. Good teachers would feel too constricted and average teachers would use it for a while and then drop it. What is needed is a general procedure, specific enough to give teachers guidance, but flexible enough for teachers to adapt it to their specific teaching situations.

The essence of Cooperative Learning is positive interdependence–students recognize that we are in this together, sink or swim. In addition, Cooperative Learning situations are characterized by individual accountability, where every student is accountable for both learning the assigned material and helping other group members learn; face-to-face interaction among students; and students appropriately using interpersonal and group skills.

There is more to the teacher's role in structuring Cooperative Learning situations, however, than structuring cooperation among students. The teacher's role includes five major sets of strategies:

- Clearly specifying the objectives for the lesson.
- Making decisions about placing students in learning groups before the lesson is taught.
- Clearly explaining the task, goal structure, and learning activity to the students.
- Monitoring the effectiveness of the Cooperative Learning groups and intervening to provide task assistance (such as answering questions and teaching task skills) or to increase students' interpersonal and group skills.
- Evaluating student's achievement and helping students discuss how well they collaborated with each other.

The following steps elaborate these strategies and detail a procedure for structuring Cooperative Learning. Specific example of lessons may be found in this handbook.

Specifying Instructional Objectives

There are two types of objectives that a teacher needs to specify before the lesson begins. The academic objective needs to be specified at the correct level for the students

Appears in *Structuring Cooperative Learning: The 1987 Lesson-Plan Handbook* by C.W. Johnson, R.T. Johnson, and E.J. Holubec. Edina, MN: Interaction Book Company 1987.

and matched to the right level of instruction according to a conceptual or task analysis. The collaborative skills objective details what collaborative skills are going to be emphasized during the lesson.

Deciding on the Size of the Group

Once the lesson objectives are clear, the teacher must decide which size of learning group is optimal. Cooperative Learning groups tend to range in size from two to six. A number of factors should be considered in selecting the size of a Cooperative Learning group:

1. As the size of the group increases, the range of abilities, expertise, skills, and number of minds available for acquiring and processing information increase. The more group members you have, the more chance to have someone who has special knowledge helpful to the group and the more willing hands and talents are available to do the task.

2. The larger the group, however, the more skillful group members must be in providing everyone with a chance to speak, coordinating the actions of group members, reaching consensus, ensuring elaboration of the material being learned, and keeping all members on task. Very few students have the collaborative skills needed for effective group functioning and, therefore, the skills have to be initially taught.

3. The materials available or the specific nature of the task may dictate group size.

4. The shorter the period of time available, the smaller the learning group should be. Smaller groups will be more effective because they take less time to get organized, they operate faster, and there is more "air time" per member.

Our best advice to beginning teachers is to start with pairs or threesomes. As students become more experienced and skillful, they will be able to manage larger groups. Six may be the upper limit for a Cooperative Learning group in most schools–more members would be too large even for very skillful members. In one classroom we recently observed the teacher had divided the class into "committees" of eight. In the typical committee some students were left out, others were passive, and some were engaged in a conversation with only one or two other members. Cooperative Learning groups need to be small enough for everyone to engage in mutual discussion while achieving the group's goals. So be cautious about group size. Some students will not be ready for a group as large as four.

Assigning Students to Groups

There are some basic questions teachers often ask about assigning students to groups:

1. Should students be placed in learning groups homogeneous or heterogeneous in member ability? There are times when cooperative homogeneous learning groups may be used to master specific skills or to achieve certain instructional objectives. Generally, however, we recommend that teachers emphasize heterogeneity of students–placing high- medium-, and low-ability students within the same learning group. More elaborative thinking, more frequent giving and receiving of

explanations, and greater perspective in discussing materials seem to occur in heterogeneous groups, all of which increase the depth of understanding, the quality of reasoning, and the accuracy of long-term retention.

2. Should non-task-oriented students be placed in learning groups with task-oriented peers or be separated? To keep such students on task, it often helps to place them in a Cooperative Learning group with task-oriented peers.

3. Should students select who they want to work with or should the teacher assign groups? Having students select their own groups is often not very successful. Student-selected groups often are homogeneous with high-achieving students working with other high-achieving students, white students working with other white students, minority students working with other minority students, and males working with other males. Often there is less on-task behavior in student-selected than in teacher-selected groups. A useful modification of the "select your own" group method is to have students list who they would like to work with and then place them in a learning group with one person they chose plus a few more students selected by the teacher. Teacher-made groups often have the best mix since teachers can put together optimal combinations of students. There are many ways teachers may assign students to learning groups. Some additional ways are:

   - Ask students to list three peers with whom they would like to work. Identify the isolated students who are not chosen by any other classmates. Then build a group of skillful and supportive students around each isolated child.

   - Randomly assign students by having them count off and placing the one's together, the two's together, and so forth. If groups of three are desired in a class of 30, have the students count off by tens.

   - How do desegregation and mainstreaming relate to how teachers assign students to learning groups? In order to build constructive relationships between majority and minority students, between handicapped and nonhandicapped students, and even between male and female students, use heterogeneous Cooperative Learning groups with a variety of students within each learning group.

4. How long should the groups stay together? For the length of the instructional unit? Actually, there is no formula or simple answer to this question. Some teachers keep Cooperative Learning groups together for an entire year or semester. Other teachers change group membership often. An elementary school setting allows students to be in several different learning groups during the day. Our best advice is to allow groups to remain stable long enough for them to be successful. Breaking up groups that are having trouble functioning effectively is often counter-productive as the students do not learn the skills they need to resolve problems in collaborating with each other.

There is merit in having students work with everyone in their class during a semester or school year. Building a strong positive feeling of collaboration across an entire class and giving students opportunities to practice the skills needed to begin new groups can add much to the learning experience. Finally, never underestimate the power of heterogeneous Cooperative Learning groups in promoting high quality, rich and involved learning.

Arranging the Room

How the teacher arranges the room is a symbolic message of what is appropriate behavior, and it can facilitate the learning group within the classroom. The group members should sit in a circle and be close enough to each other to communicate effectively without disrupting the other learning groups, and the teacher should have a clear access lane to every group.

One common mistake that teachers make in arranging a room is to place students at a rectangular table where they cannot have eye contact with all the other members; another is to place a number of desks together, which places students too far apart to quietly communicate with each other. Within each learning groups students need to be able to see all relevant task materials, see each other, converse with each other without raising their voices, and exchange ideas and materials in a comfortable atmosphere. The groups need to be far enough apart so that they do not interfere with each other's learning.

Planning the Instructional Materials to Promote Interdependence

The way teachers structure the materials to be used during a lesson can lead both to effective academic learning and positive interdependence among group members. When a groups is mature and experiences and group members have a high level of collaborative skills, the teacher may not have to arrange material in any specific way. When a group is new or when members are not very skilled, however, teachers may wish to distribute materials in carefully planned ways to communicate that the assignment is to be a joint (not individual) effort and that they students are in a sink-or-swim-together learning situation. Three ways of doing so are:

1. Materials Interdependence: Give only one copy of the materials to the group. The students will then have to work together in order to be successful. This is especially effective the first few times the group meets. After students are accustomed to collaborating with each other, teachers will wish each student to have an individual copy of the materials.

2. Information Interdependence: Group members may each be given different books or resource materials to be synthesized. Or the materials may be arranged like a jigsaw puzzle so that each student has part of the materials needed to complete the task. Such procedures require that every member participate in order for the group to be successful.

3. Interdependence with Other Groups: Materials may be structured into a tournament format with intergroup competition as the basis to promote a perception of interdependence amoung group members. In the teams-games-tournament format, students are divided into heterogeneous Cooperative Learning teams to prepare members for a tournament in which they compete with the other teams. During the intergroup competition the students individually compete against members of about the same ability level from other teams. The teams whose members do the best in the competition is pronounced the winner.

All of these procedures may not be needed simultaneously. They are alternative methods of ensuring that students perceive that they must work together and behave collaboratively to succeed in the learning situation.

Assigning Roles to Ensure Interdependence

Cooperative interdependence may also be arranged through the assignment of complementary and interconnected roles to group members. Each group member is assigned a responsibility that must be fulfilled if the group is to function. For example, the group should have a summarizer-checker to make sure everyone in the group understands what is being learned; a researcher-runner to get needed materials for the group and to communicate with the other learning groups and the teacher; a recorder to write down the group's decisions and to edit the group's report; an encourager to reinforce members' contributions; and an observer to keep track of how well the group is collaborating. Assigning such roles is an effective method of teaching students collaborative skills.

With these decisions made and the appropriate materials prepared, the teacher is ready to explain the instructional task and the cooperative goal structure to the class. The less experience the students have in working in Cooperative Learning groups, the more important it is that teachers explain carefully what cooperation is.

Explaining the Academic Task

Teachers should consider several aspects of explaining an academic assignment to students:

1. Set the task so that students are clear about the assignment. Most teachers have considerable practice with this. Instructions that are clear and specific are crucial in warding off student frustration. One advantage of Cooperative Learning groups is that these students can handle more ambiguous tasks (when appropriate) than can students working alone. In Cooperative Learning groups, students who do not understand what they are to do will ask their group for clarification before asking the teacher.

2. Explain the objectives of the lesson and relate the concepts and information to be studied to students' past experience and learning to ensure maximum transfer and retention. Explaining the intended outcomes of the lesson increases the likelihood that students will focus on the relevant concepts and information throughout the lesson.

3. Define relevant concepts, explain procedures students should follow, and give examples to help students understand what they are to learn and to do in completing the assignment. To promote positive transfer of learning, point out the critical elements that separate this lesson from past learnings.

4. Ask the class specific questions to check the students' understanding of the assignment. Such questioning ensures that thorough two-way communication exists, that the assignment has been given effectively, and that the students are ready to begin completing it.

Structuring Positive Goal Interdependence

Communicate to students that they have a group goal and must work collaboratively. We cannot overemphasize the importance of communicating to students that they are in a sink or swim together learning situation. In a Cooperative Learning group students must understand that they are responsible for learning the assigned material, making sure that all other group members learn the assigned material, and making sure that all other group members successfully complete the assignments, in that order. Teachers can do this in several ways:

1. Ask the group to produce a single product, report, or paper. Each group member should sign the paper to indicate that she agrees with the answers and can explain why the answers are appropriate. Each student must know the material. When a group is producing only one product it is especially important to stress individual accountability. Teachers may pick a student at random from each group to explain the rationale for their answers.

2. Provide group rewards. A group grade is one way to emphasize the necessity for collaboration. A spelling group where the group members work with each other during the week to make sure that all members know their words, so they can take the test individually, can be rewarded on the basis of the total number of words spelled correctly by all the members of the group. Math lessons can be structured so that students work in Cooperative Learning groups, take a test individually, receive an individual score, but are given bonus points on the basis of how many group members reach a preset level of excellence. Some teachers reward groups where all members reach a preset criterion of excellence with free-time or extra recess.

Positive interdependence creates peer encouragement and support for learning. Such positive peer pressure influences under-achieving students to become academically involved. Members of Cooperative Learning groups should give two interrelated messages: "Do your work–we're counting on you!" and "How can I help you to do better?"

Structuring Individual Accountability

The purpose of a Cooperative Learning group is to enhance the learning of each member. A learning group is not truly cooperative if individual members let others do all the work. In order to ensure that all members learn and that groups know which members to provide with encouragement and help, teachers will need to assess frequently the level of performance of each group member–by giving practice tests, randomly selecting members to explain answers, having members edit each other's work, or by randomly picking one paper from the group to grade. These are only a few ways individual accountability can be structured.

Structuring Intergroup Cooperation

The positive outcomes found within a Cooperative Learning group can be extended throughout a whole class by structuring intergroup cooperation other than through the competitive tournament format. Bonus points may be given if all members of a class reach a preset criterion of excellence. When a group finishes its work, the teacher should encourage the members to help other groups complete the assignment.

Explaining Criteria for Success

Rather than grading on a curve, evaluation within cooperatively structured lessons needs to be based on criteria established for acceptable work. Thus, at the beginning of the lesson teachers should clearly explain the criteria by which the students' work will be evaluated. The criteria of success must be structured so that students may reach it without penalizing other students and so that groups may reach it without penalizing other groups.

For some learning groups, all members can be working to reach the same criteria. For other learning groups, different members may be evaluated according to different criteria. The criteria should be tailored to be challenging and realistic for each individual group member. In a spelling group, for example, some members may not be able to learn as many as 20 words, and the number of words for such students can be reduced accordingly.

Teachers may structure a second level of cooperation not only by keeping track of how well each group and its members are performing, but also by setting criteria for the whole class to reach. Thus, the number of words the total class spells correctly can be recorded from week to week with appropriate criteria being set to promote class-wide collaboration and encouragement. These criteria are important to give students information about what "doing well" means on assigned tasks, but they do not always have to be as formal as counting the number of correct answers. On some assignments, simply completing the task may be an adequate criterion for assessing the work of some students. For others, simply doing better this week than last week may be set as a criterion of excellence.

Specifying Desired Behaviors

The word cooperation has different connotations and uses. Teachers need to define cooperation operationally by specifying the behaviors that are appropriate and desirable within the learning groups. There are beginning behaviors, such as "stay with your group and do not wander around the room," "use quiet voices," "take turns," and "use each other's names." When groups begin to function more effectively, expected behaviors may include:

- Have each member explain how to get the answer.
- Ask each member to relate what is being learned to previous learnings.
- Check to make sure everyone in the group understands the material and agrees with the answers the group has developed.
- Encourage everyone to participate.
- Encourage each member to be persuaded by the logic of the answers proposed, not by group pressure; majority rule does not promote learning.

The list of expected behaviors should not be too long. One or two behaviors is enough for a few lessons. Students need to know what behavior is appropriate and desirable within a Cooperative Learning group, but they should not be subjected to information overload.

Monitoring Students' Behavior

The teacher's job begins in earnest when the Cooperative Learning groups start working. Resist that urge to get a cup of coffee or grade some papers. Just because the teacher places students in learning groups and instructs them to be cooperative does not mean that they will always do so. Therefore, much of the teacher's time should be spent in observing group members in order to see what problems they are having in completing the assignment and in working collaboratively.

Whenever possible, teachers should use a formal observation sheet to count the number of times they observe appropriate behaviors being used by students. The more concrete the data, the more useful it is to the teacher and to students. Teachers should not try to count too many different behaviors at one time, especially when they start formal observation. At first they may just record who talks in each group to get a participation pattern for the groups. Some help on observation can be found in a chapter describing systematic observation of cooperative groups in *Learning Together and Alone* (Johnson and Johnson, 1987). Our current list of behaviors (though rather long) includes: contributing ideas, asking questions, expressing feeling, actively listening, expressing support and acceptance (towards ideas), expressing warmth and liking (toward group members and group), encouraging all members to participate, summarizing, checking for understanding, relieving tension by joking, and giving direction to the group work.

We look for positive behaviors, which are to be praised when they are appropriately present and which are a cause for discussion when they are missing. It is also a good idea for the teacher to collect notes on specific student behaviors so that the frequency data is extended. Especially useful are skillful interchanges that can be shared with students later in the form of objective praise and perhaps with parents in conferences or telephone conversations.

Student observers can get even more extensive data on each group's functioning. For very young students the system must be kept very simple, perhaps only "Who talks?" Many teachers have had success with student observers, even in kindergarten.

One of the more important things the teacher can do is to make sure that the class is given adequate instruction (and perhaps practice) on gathering the observation data and sharing it with the group. The observer is in the best position to learn about the skills of working in a group. We remember one first grade teacher who had a student who talked all the time (even to himself while working alone). He dominated any group he was in. When the teacher introduced student observers to the class, she made the student an observer. (One important rule for observers is not to interfere in the task but to gather data without talking.) He gathered data on who talked and did a good job, noting that one student had done quite a bit of talking in the group while another had talked very little. The next day when he was back in the group and no longer the observer, he started to talk, clamped his hand over his mouth, and glanced at the new observer. He knew what behavior was being observed, and he didn't want to be the only one with marks for talking. The teacher said he may have listened for the first time all year. Thus the observer often benefits by learning about group skills.

Observers, moreover, often know quite a bit about the lesson. When teachers are worried about losing the lesson content, they can have the observer take the group through the material as a last review. Often important changes are made during this review.

It is not necessary to use student observers all the time, and we would not recommend their use until Cooperative Learning groups have been used a few times. In the beginning it is enough for teachers simply to structure the groups to be cooperative without worrying about structuring student observers, too. Whether student observers are used or not, however, teachers should always do some observing and spend time monitoring the groups. Sometimes a simple checklist is helpful in addition to a systematic observation form. Some questions to ask on the checklist might be: Are students practicing the specified behaviors, or not? Do they understand the task? Have they accepted the positive interdependence and the individual accountability? Are they working toward the criteria and are the criteria for success appropriate?

Providing Task Assistance

In monitoring the groups as they work, teachers will wish to clarify instructions, review important procedures and strategies for completing the assignment, answer questions, and teach task skills as necessary. In discussing the concepts and information to be learned, teachers should use the language or terms relevant to the learning. Instead of saying, "Yes, that is right," teachers might say something more specific to the assignment, such as, "Yes, that is one way to find the main idea of a paragraph." The use of specific statements reinforces the desired learning and promotes positive transfer.

Intervening to Teach Collaborative Skills

While monitoring the learning groups, teachers sometimes find students without the necessary collaborative skills and groups with problems in collaborating. In these cases the teacher may intervene to suggest more effective procedures for working together and more effective behaviors for students to engage in. Teachers may also wish to intervene and reinforce particularly effective and skillful behaviors as they are noticed. The teacher at times is a consultant to a group. When it is obvious that group members lack the necessary collaborative skills to cooperate with each other, the coordinator will want to intervene to help the members learn these skills.

Teachers should not intervene in the groups any more than is absolutely necessary. Most teachers are geared to jumping in and solving problems for students as they occur. with a little patience, we find that cooperative groups can often work their way through their own problems (task and maintenance) and acquire not only a solution, but also a method of solving similar problems in the future. Choosing when to intervene and when not to is part of the art of teaching, and teachers can usually trust their intuition. Even after intervening, teachers can turn the problem back to the group to solve. Many teachers intervene by having members set aside their task, pointing out the problem, and asking the group to come up with an adequate solution. The last thing teachers want is for the students to come running to the teacher with every problem.

For example, a third grade teacher noticed while passing out papers that one student was leaning back away from the other three group members. A moment later, the three students marched over to the teacher and complained that Johnny was under the table and wouldn't come out. "Make him come out!" they insisted (the teacher's role: police officer, judge, and executioner). The teacher told them that Johnny was a member of their group and asked what they had tried. The children were puzzled. "Yes, have you asked him to come out?" the teacher suggested. The group marched back, and the teacher continued passing out papers. A moment later, the teacher glanced at their table and saw no heads above the table (which is one way to solve the problem). Shortly, four heads came struggling out from under the table, and the group (including Johnny) went back to work with great energy.

We don't know what happened under the table, but whatever it was, it was effective. What makes this story even more interesting is that the group received a 100 percent on the paper and later, when the teacher was at Johnny's desk, she noticed he and the paper clutched in his hand. The group had given Johnny the paper and he was taking it home. He confided to the teacher that this was the first time he could ever remember earning a 100 percent on anything in school. (If that was your record, you might slip under a few tables yourself.)

The best time to teach cooperative skills is when the students need them. It is important that the cooperative skills be taught in the appropriate context or are practiced in that setting, because transfer of skill learning from one situation to another cannot be assumed. Students learn about cooperative skills when they are taught them, and learn cooperative skills when applying them in science, math, or English. The good news about cooperative skills is that they are taught and learned like any other skill. At a minimum:

- Students need to recognize the need for the skill.
- The skill must be defined clearly and specifically including what students should say when engaging in the skill.
- Practice of the skill must be encouraged. Sometimes just the teacher standing nearby with a clipboard and pencil will be enough to promote student enactment of the skill.
- Students should have the time and procedures to discuss how well they are using the skill.
- Students should persevere in the practice until the skill is appropriately internalized. We never drop a skill, we only add on.

For older students (upper elementary school and above) the skills have been worked out and summarized in *Joining Together* (Johnson and F. Johnson, 1987) and *Reaching Out* (Johnson, 1986). For younger students, teachers may need to revise and rename cooperative skills. Some primary teachers use symbols like traffic signs with a "green light" encouraging participation, a "stop sign" meaning time to summarize, and "slippery when wet" meaning "Say that over again; I didn't quite understand."

Sometimes a more mechanistic structure is beneficial for young students. In one first grade class, there were a number of students who liked to dominate and take over the group. One day, in frustration, the teacher formed groups and handed each group member five poker chips with a different color for each group member. The students were instructed to place one chip in a box every time they spoke while working on the worksheet. A student could not speak after all his or her chips were "spent." When all the chips were in the box, they could get their five colored chips back and start again. Several students were surprised when they discovered their five chips were the only ones in the box!

Teachers need only use these devices once or twice to get the message across. This technique was later used in a monthly principals' meeting. As the principal came in, each was handed several colored strips of paper. When they spoke . . .

Teaching cooperative skills is necessary for implementing Cooperative Learning groups into a classroom. We recommended that only a few skills be taught each semester. Most curriculum programs with Cooperative Learning groups written into them feature about five to eight cooperative skills for one year.

Providing Content Closure to the Lesson

At the end of the lesson, students should be able to summarize what they have learned and to understand where they will use it in future lessons. To reinforce student learning, teachers may wish to summarize their major points in the lesson, ask students to recall ideas or give samples, and answer any final questions they may have.

Evaluating the Quality of Students' Learning

The product required from the lesson may be a report, a single set of answers agreed upon by all group members, the average of individual examination scores, or the number of group members reaching a specific criterion. As we pointed out earlier, whatever the product, student learning needs to be evaluated by a criteria-referenced system. In addition to an assessment on how well they are learning the assigned concepts and information, group members should also receive feedback on how effectively they collaborated. Some teachers give two grades, one for achievement and one for collaborative behavior.

Assessing How Well the Group Functioned

An old rule concerning observations of groups states that if you observe, you also must process those observations with the group. Processing need not occur in depth every day, but should happen often. Even if class time is limited, some time should be spent talking about how well the groups functioned today, what things were done well, and what things could be improved. Whole-class processing can include some feedback from the teacher (the principal observer) and some observations from members of the class. This can often include having a group share with the class an incident in their group and how they solved it. Names need not be used, but the feedback should be as specific as possible.

Groups new to the process often need an agenda, including specific questions each group member must address. A simple agenda might request each group to name two things they did well (and document them) and one thing they need to do even better, or would like to work harder on.

The time spent in discussing how well the group functioned is well spent, since each small group has two primary goals: (1) to accomplish the task successfully, and (2) to build and maintain constructive relationships in good working order for the next task. If a group is growing properly, it will become more and more effective. Often during the "working" part of the class period, students will be very task-oriented, and the "maintenance" of the group may suffer. During the processing time, however, the emphasis is on maintenance of the group, and the students leave the room ready for (a better?) tomorrow. If no processing is done, teachers may find the group's functioning decaying, and important relationships left undiscussed. Processing the functioning of the group needs to be taken as seriously as accomplishing the task. The two are very much related. Teachers often have students turn in a "process sheet" along with the paper required from the task assignment. Teachers will want to have a structured agenda or checklist for the groups to work with during the process as inexperienced groups tend to say, "We did fine. Right? Right!" and not deal with any relevant issues.

Group processing should focus both on members' contribution to each other's learning and to the maintenance of effective working relationships among group members. In order to contribute to each other's learning, group members need to attend class, to have completed the necessary homework required for the group's work, and to have provided needed explanations and examples. Absenteeism and lack of preparation often demoralize other members. A productive group discussion is one in which members are present and prepared and there should be some peer accountability to be so.

On the other hand, learning groups are often exclusively task oriented and ignore the importance of maintaining effective working relationships among members. Group sessions should be enjoyable, lively and pleasant. If no one is having fun, something is wrong. Problems should be brought up and solved, and there should be a continuing emphasis on improving the effectiveness of the group members in collaborating with each other.

Conclusions

These 18 aspects of structuring learning situations cooperatively blend together to make effective Cooperative Learning groups a reality in the classroom. They may be used in any subject area with any age student. Teachers who have mastered these strategies and integrated Cooperative Learning groups into their teaching often say, "Don't say it is easy!" There is a lot of pressure to teach like everyone else is teaching, to have students learn alone, and to not let students look on each other's papers. Students will not be accustomed to working together and are likely to have a competitive orientation. It isn't easy, but it is worth the effort.

Another bit of advice would be to start small and build. Pick a time in the school day when you are pretty sure it would work, plan carefully, and don't rush the process. Cooperative learning groups should evolve into a teacher's program rather than to become a part of every class on the first day.

The good news is that many of your students will do well immediately. While two groups may struggle because of a lack of group skills, five will do well. Celebrate the five and problem solve with the two. Keep in mind that the students who are most difficult to integrate into groups are often the ones who need the peer support and positive peer pressure the most. Resist that advice you were given as a beginning teacher to isolate students who pester others or show that they lack interpersonal skills; instead, concentrate on integrating them into their peer group effectively. Other students often have the most powerful influence on isolated, alienated students. Such students cannot be allowed to plod through school disconnected, lonely, and bitter.

In addition, cooperative, supportive relationships are just as productive for adults as they are for students. Teachers are more effective when they have positive support from colleagues and can solve problems together. Teachers need to give some thought to establishing their own cooperative group as they implement cooperation in their classrooms.

It is also important to repeat that we would be disappointed if we visited a teacher's classroom and saw only Cooperative Learning groups. The data are clear. Cooperation should produce better results in school than having student work alone, individualistically or competitively. Yet there is an important place for competitive and individualistic goal structures within the classroom. The major problems with competition and individualistic efforts result from overuse or inappropriate use.

In addition to cooperative skills, students need to learn how to compete for fun and enjoyment (win or lose) and how to work independently, following through on task until completion. The natural place for competitive and individualistic efforts is under the umbrella of cooperation. The predominant use of cooperation reduces the anxiety and evaluation apprehension associated with competition. It also allows for using individualistically structured learning activities as part of a division of labor within cooperative tasks. But, most of all, students should learn how to work together and to give each other support in learning. Some teachers weave the three goal structures together: setting up individual responsibility (accountability to the group), peer teaching, competing as a light change of pace, and ending in a cooperative project. Thus, they do what schools should do–prepare students to interact effectively in cooperative, competitive, and individualistic structures.

Structuring Cooperative Learning Lesson Plans

After two years of collaborative efforts, regular, special, and bilingual education teachers throughout California with the assistance of the Special Education Resource Network Cooperative Learning training specialists agreed to standardize Cooperative Learning lesson plans to the following format. The format was adapted from that developed by Drs. Roger and David Johnson of the University of Minnesota. All lesson plans submitted for publication in this handbook were required to follow the specified format.

The California Cooperative Learning lesson plan follows six steps:

1. Select a Lesson
2. Make Decisions
3. Set the Lesson
4. Monitor and Process
5. Indicate Problems and Interventions
6. Evaluate Lesson Outcomes

Select a Lesson

Selecting a lesson means deciding what will be taught–2-digit subtraction without borrowing, the landing at Plymouth Rock, this week's spelling list, a group collage, discovering attributes of mammals. Lesson objectives should be specific and tailored to students' ability levels and the allotted time period. Within this handbook, we have listed this step as "The Lesson." Suggestions are provided for efficient management of lesson materials and activities. Sequential steps for carrying out the lesson are listed under the procedure.

Make Decisions

Four main ideas are spelled out in this section:

- The size of each group
- How students are assigned to groups
- Room arrangement
- Materials needed.

Set the Lesson

Within this section the teacher determines the specific words to use with the students. These words let them know what they need to do. The following should be specified:

- Task
- Group Goal
- Criteria for Success
- Specific Behaviors Expected.

Monitor and Process

The teacher notes the kinds of actions that will be sought from the students, the kind of observation form to be used, who will observe (teacher and/or students), and the plan for providing feedback to the students (processing).

Indicate Problems and Interventions

This part of the lesson plan is completed both before and after the lesson is given:

- Possible Problems (teacher lists)
- Observed Problems (teacher notes after the lesson)
- Possible Interventions (teacher lists)
- Actual Interventions (used during the lesson).

Evaluate Lesson Outcomes

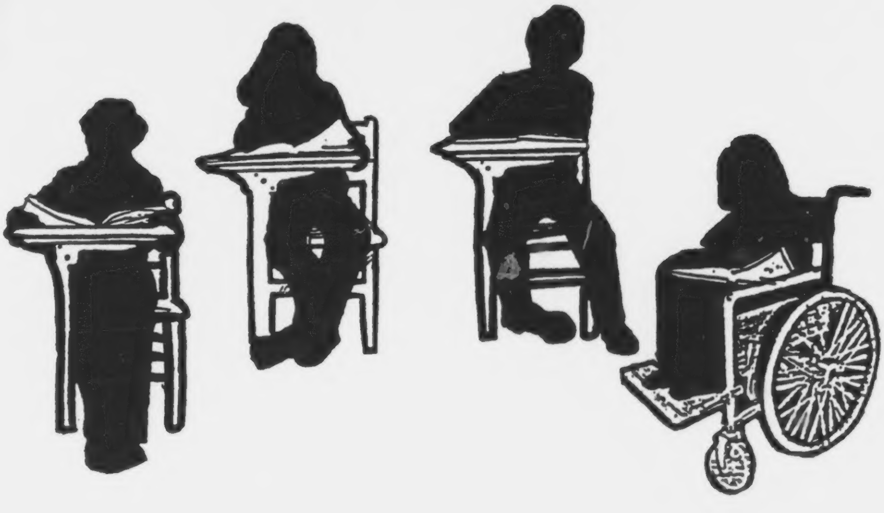
Completed after the lesson is given, this part of the lesson plan provides processing time for the teacher, gives direction for the next lesson, and reinforces that which worked well:

- Task Achievement
- Group Functioning
- Notes on Individuals (students with specific difficulties; interventions that were successful)
- Suggestions for Next Time.

Under this section, some teachers included directions for follow-up activities and complete unit activities.

Cooperative Learning Lesson Plans

Language Arts/Reading



SHOW AND TELL

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GRADE LEVEL: Primary SUBJECT: Language Arts

GROUP SIZE: Two students.

ASSIGNMENT TO GROUPS: Pair student differently each week, based on listening and verbal skills.

ROOM ARRANGEMENT: Whole class in circle at front of room with teacher.

MATERIALS NEEDED: None.

SETTING THE LESSON

TASK STATEMENT: "We're going to do show and tell. You will share what you have to say, or what you brought with your partner. Both people will get a chance to share with their partner. Then I will ask for five boys and girls to tell the whole class something for show and tell. What they will share is what they heard from their partner."

GROUP GOAL: To have each person be able to tell what their partner said.

CRITERIA FOR SUCCESS: Students called on will be able to share what their partner told them and have the partner agree that it is accurate.

SPECIFIC BEHAVIORS EXPECTED: "You must be quiet and listen when your partner is talking. You must look at your partner. You can repeat what your partner said and ask him/her if it was what was said."

THE LESSON

PROCEDURE:

1. Have student pairs turn chairs to face each other.
2. Allow five minutes for each student to share to partner

3. Have partners switch roles after five minutes.
4. Select five students to share what their partner shared with them to the large group.
5. Reinforce good listening.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Children listened - not always looking at their partner (sometimes interested in what other pairs are talking about).

OBSERVATION FORMAT: None

OBSERVER (S): Teacher

PLANS FOR PROCESSING; Ask each person to tell their partner "thank you for listening to me." (This can get more advanced for older children.)

PROBLEM AND INTERVENTIONS

POSSIBLE PROBLEMS: Children will not stay with their partner. Children will want to talk, but not listen. Children will share what they brought to share, instead of what their partner shared.

OBSERVED PROBLEMS: Students had to be reminded to share what their partner said and needed to say it more quickly (as in any sharing time).

POSSIBLE INTERVENTIONS: Give time signals when it's time to switch sharing with partners. At this half way time, remind children to listen and look at partner.

ACTUAL INTERVENTIONS: See above. Also, individual reminders to certain children who get too noisy. Physically standing next to certain pairs helps.

EVALUATING OUTCOMES

ACADEMIC TASK ACHIEVEMENT: Task was completed. When reminded about sharing from what partner said, and then asking partner if that was in fact what they had said, all students did well.

GROUP FUNCTIONING: Some groups needed reminding to stay on task, and not to just keep talking about silly things.

NOTES ON INDIVIDUALS: Change some groups next time.

SUGGESTION FOR NEXT TIME: Make sure to keep time on how long each partner shares. Ask certain groups to move farther away from the main group, so as not to disturb others. Also, remind groups to use quiet voices.

WE'D RATHER

Nancy Whisler
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Richmond Unified School District

GRADE LEVEL: K-6 SUBJECT: Language Arts-Reading

GROUP SIZE: Whole class divided into groups of 4

ASSIGNMENT TO GROUPS: Heterogeneous grouping predetermined by teacher.

ROOM ARRANGEMENT: 4 single desks pushed together

MATERIALS NEEDED:

- Eight strips of scratch paper 1" x 8 1/2"
- Eight phrases or sentences with directions printed on a chart or chalkboard (one primary and one intermediate grade, examples on the next page).
- Pencils for each student.

SETTING THE LESSON

TASK STATEMENT: "Your group's job today is to work cooperatively together to rank the eight phrases/sentences in an order your team agrees goes from the one you'd most like to do to the one you'd least rather do."

GROUP GOAL: To reach consensus/agreement on a rank order of the items on the chart that the team feels they would rather do.

CRITERIA FOR SUCCESS: To be able to explain why the items were ranked in the order the team agreed on.

SPECIFIC BEHAVIORS EXPECTED: This is an excellent lesson to use in teaching the social skill reaching agreement. During the social skill instruction discussion centers around ways to get a consensus. The "We'd Rather" lesson provides an opportunity to practice the ideas brought up.

THE LESSON

MANAGEMENT SUGGESTION:

1. During the social skill instruction, discuss with students ways to reach consensus.
2. Start the groups by having each member write the two phrases/sentences next to their team number on the strip of paper provided.

PROCEDURE:

Primary Example

Directions: With your team rank the activities/events on your strips on a continuum that goes from the one you would least like to do to the one you would rather do. Which would you rather do? We'd Rather:

Team #1 paint things red.
go to a park.

Team #2 take a walk.
have a surprise party.

Team #3 play with friends.
sit on a bus.

Team #4 eat ice cream.
read a book.

Intermediate Grade Example

Directions: With your team, rank the activities/events on your strips on a continuum that goes from one that would make you smile the most to the one that would make you smile the least.

Team #1 seeing someone imitate you
being convinced your team won.

Team #2 hoisting a forsail
getting a $100.00 prize

Team #3 being in a catastrophe
sharing your dessert

Team #4 being furious with someone
finding your gold bracelet

NOTE: *"We'd Rather" lends itself to being the beginning of many key phrases.*

Other Possibilities:

Which is the funniest?

Which makes you smile the most?

Which takes the most energy?

- How much money would it take to ?____
- Which is most important for your overall health ?____
- Would a miser be more likely to ?____

The adaptations for incorporating "We'd Rather" are limitless.

MONITORING AND PROCESSING:

EVIDENCE OF EXPECTED BEHAVIORS: In monitoring the lesson, the teacher observes students picking up the strips and comparing items, discussing, debating, evaluating, changing, and agreeing on a final rank order the team thinks the items should be placed in.

OBSERVATION FORM: The teacher notes specific examples of things heard and seen during the work time of the lesson.

PLANS FOR PROCESSING: The teacher tapes the main idea sentence strip shown below to the chalkboard. Then each group discusses and writes one supporting detail sentence that gives an example or describes what their team did. These are taped on the chalkboard to form a paragraph as follows:

The social skill we practiced today was reaching agreement.

We let everyone have a turn.

We had to compromise.

Our group talked a lot.

Following the student processing paragraph, the teacher shares the specific behaviors she observed of students practicing the social skill of reaching agreement.

POSSIBLE PROBLEMS: If students aren't able to copy the sentences/phrases on the strips, they can be duplicated, cut, and placed in envelopes for the student teams to rank.

POSSIBLE INTERVENTIONS: The teacher may need to show students how to compare two items and ask the key question, then compare a third item until all are incorporated in a desired rank order.

EVALUATING OUTCOMES

TASK ACHIEVEMENT: Students enjoy sharing the order in which their team ranked the items. Students read the phrases or sentences that they wrote during the sharing. It's important, at the minimum, to let them share the top and lowest ranked items.

THE GOOP

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GRADE LEVEL: K - 8 (May be adapted to all grade levels.) SUBJECT: Language Arts

GROUP SIZE: 2 - 4 students.

ASSIGNMENT TO GROUPS: Colored dots previously put on name tags.

ROOM ARRANGEMENT: Students sit in chairs around a desk or tables at various areas of the room.

MATERIALS NEEDED:

- Red, blue, green, yellow, purple, and/or white goop in covered bowls on table.
- Pencil and paper.
- Damp paper towels.
- Glue stick and piece of construction paper to match the goop.
- Cut up sentence strips in envelopes.

SETTING THE LESSON

TASK STATEMENT: "Today you are going to have fun working together thinking up adjectives to describe what you are working with and putting a story in an order that makes sense."

GROUP GOAL: List descriptive words and paste the sentence strips in order on the construction paper. All members sign the sheet.

CRITERIA FOR SUCCESS: Each member in the group will participate and encourage each other to complete the task.

SPECIFIC BEHAVIORS EXPECTED: Show and discuss chart on "looks like" and "sounds like" for *participation* and *encouragement*. Show a teamwork poster and discuss example of teamwork.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Predetermine groups and make name tags with specific colored dots on each tag corresponding to group.
2. Make up goop in advance. Have ready one covered bowl for each group.

Recipe for "The Goop"

Add some food coloring to cold water (about one cup). Mix two cups cornstarch into the colored water to make a mixture that looks creamy but feels semi-hard when poked with a fork. It will last for a day or two, covered, stored at room temperature.

M. Dunaway
Resource Room

3. Prepare sentence strips and put in one envelope per group.

Once upon a time, two brothers named Pete and Mike were visiting their grandmother who lived alone in a big old house.
Grandmother sent the two boys down to her cellar to bring her a jar of homemade jam that she canned.
Pete and Mike walked slowly down the stairs as the cellar light was burnt out.

As the two boys reached for the jam they felt something ____________________.

Pete yelled that something ______________________________ was on his hand.

They tried to get the ____________________ off his hand but it seemed to stick.

Mike said it felt ____________________ and ____________________.

So Pete and Mike played with the ____________________ ____________________
stuff while standing in the dark.

Then they decided to take the ____________________ ____________________
upstairs to grandmother to show her what they found.

As they carried the ____________________ ____________________
up the stairs, when they reached sunlight it seemed to disappear.

To this day Pete and Mike are not able to explain what the____________________
____________________ was that they found that day in grandmother's
cellar.

4. Explain what adjectives are and their grammatical function. List examples on board.

5. Discuss expected group behaviors:
   participation
   encouragement
   teamwork

PROCEDURE:

1. Allow a specific amount of time for experimenting with "the goop."
2. When this time limit has been reached, have students compile a list of adjectives.
3. From this list, each group is to complete the sentence strips.
4. Each group must then put the sentences in sequential order to make a story.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- *Participation*: Playing with the goop, animated expression, leaning in to group, laughing.
- *Encouragement*: Statements like "You can do it." "It's fun." "That's a good idea!"

OBSERVATION FORM: Write positive comments heard from each group.

OBSERVER(S): Teacher and aide or student observers.

PLANS FOR PROCESSING: "Put you heads together and rate your group from one (lowest) to five (highest) on the following social skills: Did everyone in your group participate in the lesson? Rate yourselves on the encouraging remarks made to each other." (Get an encouraging comment from one member of each group.)

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Not wanting to touch the goop. Restraining the excitement. Materials for clean up is necessary.

OBSERVED PROBLEMS: The students did not want to stop playing with the goop.

POSSIBLE INTERVENTIONS: Remind students that the goop comes right off your clothes and hands with water or a damp cloth.

ACTUAL INTERVENTIONS: "Just poke it with your finger and see how hard it is. Now push very slowly with your finger and see what happens." "Choose a recorder to write down the adjectives." "Does your story make sense?"

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Have a reader in each group read their sequenced story to the entire group for validation.

GROUP FUNCTIONING: Did they enjoy the experience of working together? Ask them if they would like to do this again? Did they complete the task? As a teacher, did you see the social skills being demonstrated in the groups?

NOTES ON INDIVIDUALS: Notice the shy or aggressive student. Notice the ones who are encouraging others. Notice which groups work well. Ask them why? Talk to students in their groups and talk to them individually about strengths and weaknesses.

SUGGESTIONS FOR NEXT TIME: For younger primary students, a one-word group sentence about the goop would be a sufficient task. For upper-level students, each group could write their own story about the goop.

BROTHERS GRIMM FAIRY TALES

Rebecca Preble
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Corning Union Elementary School Dirict
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GRADE LEVEL: 3rd SUBJECT: Reading & Written Language

GROUP SIZE: 3 to 4 students.

ASSIGNMENT TO GROUPS: Students were given numbers on cards from one to six. All corresponding numbers were asked to go to assigned table area.

ROOM ARRANGEMENT: Desks are arranged into working tables placed together with chairs around "table" area .

MATERIALS NEEDED:

- Six copies of the well known Brothers Grimm fairy tales taken from a fairy tale book of appropriate readability level.
- Six question sheets probing in the higher level thinking skills about each fairy tale.
- Pencils.
- Cards showing names and pictures of specific Cooperative Learning jobs.
- Lined paper for answers.

SETTING THE LESSON

TASK STATEMENT: After students choose jobs, "Each group will receive one copy of a fairy tale. These are to be read and answered using complete sentences. You are to use your verbal cooperation skills to complete this task."

GROUP GOAL:

- Each student will learn by completing reading, writing, test, illustrations and acting the basic understandings of the Brothers Grimm Fairy Tales while working within Cooperative Learning groups.

- Each student will show cooperative social interaction growth by accepting responsibility of specific job designated, and by verbal responses to others within the group.
- Each student will verbally give perceived moral for fairy tales presented to group.
- Each student will participate in the writing of a present-day fairy tale, and each student will act out part for presentation to primary students. Each student will participate in making props for the play.

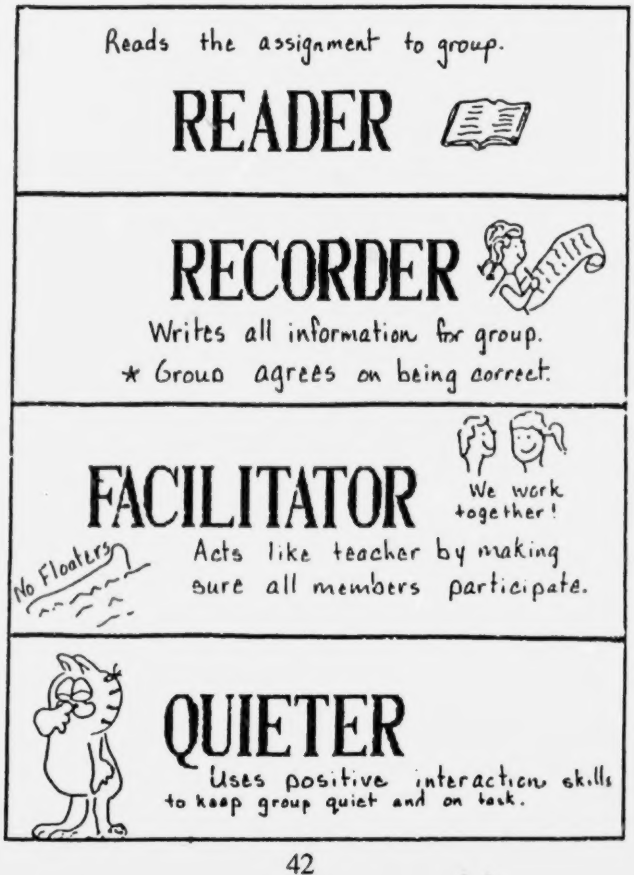
CRITERIA FOR SUCCESS: Each group will receive 75% accuracy or above.

SPECIFIC BEHAVIORS: Each group will use verbal cooperative dialogue while completing assigned tasks, at least twice during a 45 minute session.

THE LESSON

MANAGEMENT SUGGESTIONS: The teacher can ask students to "brainstorm" verbal cooperative remarks. These phrases may be written on chalkboard. The teacher then leads the whole class in reading remarks written on the board.

PROCEDURE: Place students into a Cooperative Learning roup by having the students go to the numbered areas in the room, e.g. ones to the area by the windows, etc. Teacher tells how Cooperative Learning is a group process, and writes the jobs and descriptions on the chalkboard. Each group is given two minutes to choose jobs. The duplicated Brothers Grimm Fairy Tales are handed out to each group randomly. groups are to read the fairy tales and answer, in written form, the questions for each fairy tale.



Reads the assignment to group.

READER

RECORDER

Writes all information for group.

★ Group agrees on being correct.

FACILITATOR

Acts like teacher by making sure all members participate.

QUIETER

Uses positive interaction skills to keep group quiet and on task.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Students were given individual verbal rewards and stickers when teacher heard appropriate cooperation remarks.

OBSERVATION FORMAT: None at present.

OBSERVER(S): Teacher.

PLANS FOR PROCESSING: During the lesson, the teacher gave verbal approval and stickers. After lesson, teacher lead a whole class evaluation of task and how students felt when a group member gave a cooperative remark to them.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: For a class such as this one, used to working in an independent competitive mode, grouping may interfer with completion of the task and disrupt the class structure for the classroom teacher.

OBSERVED PROBLEMS: Some students were unable to use positive remarks and some were unable to allow others to complete specific Cooperative Learning jobs.

POSSIBLE INTERVENTIONS: Be understanding to individuals who find grouping difficult and continue to model required verbal interaction comments.

ACTUAL INTERVENTIONS: Same as above and be aware when correct behaviors are given. These were rewarded with stickers. Verbal reward was given loudly for the entire class to hear.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT:

- Each group received 80% or above on the answers to the questions.
- Each group had at least two group members receive stickers.
- All students "liked" the group work when surveyed during evaluation of lesson.

GROUP FUNCTIONING: All students "liked" the cooperative grouping. During evaluation of lesson, some students remarked that they got to be friends with new people.

NOTES ON INDIVIDUALS: It was difficult for one mature young lady to allow others to perform their jobs. She wanted to intervene and complete the task by herself.

SUGGESTION FOR NEXT TIME: Spend more time on the social behavior. First, role play specific problems that might arise and model appropriate social behavior. After this, continue the lesson designed.

See attached sheet of objectives Days 1-21.

OBJECTIVES: Day 1

Each group is to illustrate their fairy tale, in sequential pictures, on a large piece of poster paper. These posters will be presented to the rest of the class for guesses as to the fairy tale the group is illustrating. The last 15 minutes of class are to be used for discussion about how the groups are working in the Cooperative Learning model.

OBJECTIVES: Day 2

Each group, after choosing new jobs, is to begin writing a fairy tale in present-day time and use present-day situations. They can use Brothers Grimm Fairy Tales as an example and just change the information to fit today's life styles. The last 15 minutes will be used to share the written fairy tale each group has written so far. Teachers and other groups may comment and make suggestions.

OBJECTIVES: Day 3

Continue the Day 2 objectives.

OBJECTIVES: Day 4

Continue the Day 3 objectives and finalize the fairy tales. Groups can begin illustrations to go with the written fairy tale. Each group member will receive a duplicated copy of the fairy tale for own book.

OBJECTIVES: Day 5

Give two minutes for each group to choose new jobs. Each group will illustrate the fairy tale they've written on large poster paper for class presentation.

OBJECTIVES: Day 6

After each group has choosen new jobs, the groups will present by reading the fairy tale and showing the pictures to the whole class. After each group presents the products, they may receive five minutes of comments from the class members.

OBJECTIVES: Day 7

Teachers will lead a whole class discussion about the group's abilities to work within the Cooperative Learning model. This discussion will include some comments about how productive the groups have been in producing the products outlined.

OBJECTIVES: Day 8

Groups are given an English lesson in how plays are written by teachers using a team-teaching technique. Groups are given two minutes to choose new jobs. Each group will begin writing the play. Each member within the group is to have a part in the play.

OBJECTIVES: Day 9

Groups are to continue with the Day 8 objectives.

OBJECTIVES: Day 10

Students are to finalize the play for the first part of the class period. They may begin sharing their play, by reading it to the class, at the end of the period. Each group will allow five minutes for discussion and/or comments from the other groups and teachers.

OBJECTIVES: Day 11

Continue with Day 10 objectives. Teachers lead discussion and comments about the over-all progress of the playwriting. Begin thoughts about how the props are to be made by giving suggestions how situations can be made real by props.

OBJECTIVES: Day 12

Groups are to begin making the props for their play. Teachers are to "float" and be available for suggestion giving.

OBJECTIVES: Day 13

Continue with Day 12 objectives. Allow 15 minutes at the end of the period to have a whole class discussion about the progress.

OBJECTIVES: Day 14

Final day for prop making. Re-group, ask groups if the process of making the props may take additional time. Those groups who are finished may begin practicing the parts cooperatively given. Extra space is necessary at this time, i.e. a cafeteria, or another classroom may be used with supervision.

OBJECTIVES: Day 15

All groups are to practice acting out the play they have written. Use the last 15 minutes for a whole class discussion for the teachers to find out how things are going, and for the groups to express any concerns they may be having at present.

OBJECTIVES: Day 16

Continue Day 15 objectives.

OBJECTIVES: Day 17

Teachers are to take students into the cafeteria to go through a semi-dress rehearsal. Allow time for groups to have discussion about problems.

OBJECTIVES: Day 18

Dress rehearsal time. Students are to bring all materials to cafeteria for props, and they are to bring clothing for themselves for the parts they play. Allow time for discussion and suggestions from peers and teachers.

OBJECTIVES: Day 19

Students are to write invitations to the primary classes. Teachers are to allow half of the period to let the groups talk about what is working well or to comment about some problems with the acting. It is important for the teachers to give comments that will help the groups act out the play and feel positive about their group presentation.

OBJECTIVES: Day 20

Groups present the plays to the primary classes.

OBJECTIVES: Day 21

Each member of all groups is to write a five paragraph paper (or more) evaluating the group process and the product. Each group will participate in a whole class discussion about the end product and how Cooperative Learning helped the group product.

JOBS, JOBS, JOBS

Gary Thornton
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GRADE LEVEL: Fourth - Sixth SUBJECT: Deductive Thinking Skills

GROUP SIZE: 3-5 Students

ASSIGNMENT TO GROUPS: Heterogeneous groups assigned by teacher. Teacher to designate one group member as "helper".

ROOM ARRANGEMENT: Seat participants within each group close together around a table or desk. Spread groups around room.

MATERIALS NEEDED:

- 1 set of clue cards
- 1 piece of paper to record answers and signatures of group members
- 1 pencil or pen
- 1 task card with directions
- 1 observation sheet for each group

SETTING THE LESSON

TASK STATEMENT: Your group's task is to solve the "Mind Bender" puzzle using the clues each group member has been given. You are also to practice the skills of praising, checking, and encouraging.

GROUP GOAL: To find the answer to the questions, "What two jobs does each person have?" To practice the social skills of praising, checking, and encouraging others.

CRITERIA FOR SUCCESS: One correct answer to the question. The group must agree with the answer. One completed answer sheet with all group members' signatures.

SPECIFIC BEHAVIORS EXPECTED:

Each member is to share his clue with the group.
Each member is to participate in the discussion.
Each member is to practice the social skills of praising, encouraging, and checking.

THE LESSON

PROCEDURE:

1. Each group member will be given a card with a clue that will help the group solve the puzzle.
2. Each group member may share his information with the goup, but DO NOT PASS THE CARD AROUND THE GROUP FOR OTHERS TO READ. If a group member has a problem reading his card, he may ask the "helper" to help him.
3. It is a good idea to share all the information before trying to solve the problem.
4. Decide what the puzzle is about and what you need to do to solve it. Use the worksheet to record your clues and help you solve the puzzle.
5. When you have a solution to the puzzle that all members of the group agree on, fill out the answer sheet and raise your groups hands to have your answers checked.
6. If you have the correct answers, you will have completed the task. If your answers are not correct, you will be given an additional chance to solve the puzzle. You will have only three (3) chances to solve the puzzle.
7. Use the skills of praising, encouraging others and checking for understanding.

MIND BENDER CLUES

Each clue should be written on a separate card. The number of clues given each group member will depend on the number of group members. The clues are divided with the idea of having six group members per group. The problem comes from DEDUCTIVE THINKING SKILLS--MIND BENDERS B1 published by Midwest Publications Co., Inc., 1978.

- Roberta, Steve, Thelma and Vince each have two jobs. Listed alphabetically the jobs are chef, nurse, police officer, professional wrestler, security guard, teacher, telephone operator and waiter. Using the clues on the next page, complete the group worsheet.

- Roberta, the chef, and the police officer all went golfing together.
- Vince never had any eduction past the ninth grade.
- The nurse was assigned to desk duty when he sprained his ankle.
- The chef's husband is the telephone operator.
- Roberta is not the professional wrestler.

JOBS, JOBS, JOBS
(Mind Bender Puzzle)
*Group Worksheet

	chef	nurse	police officer	prof. wrest.	secur. guard	teacher	tele. oper.	waiter
ROBERTA								
STEVE								
THELMA								
VINCE								

*Depending on the age and level of each group's problem solving skills, you may give each group blank grid and have them supply the names and job titles.

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ANSWER SHEET

GROUP NAME: ____________________

PUZZLE SOLUTION:

Roberta ______________ ______________
Steve ______________ ______________
Thelma ______________ ______________
Vince ______________ ______________

GROUP SIGNATURES: ______________ ______________
______________ ______________

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

Frequency of participation in discussion
Frequency of participation in decision making
Frequency of sharing clue with group
Frequency of type and number of social skills used

OBSERVERS: Teacher and aide.

OBSERVATION FORMAT: Checklist using tally marks

GROUP NAME: ________________ DATE: ________________

ENCOURAGING OTHERS						
CHECKING FOR UNDERSTANDING						
PRAISING						

GROUP GOALS SHEET

GROUP NAME: ____________________ DATE: ____________________

NEXT TIME, OUR GROUPS AGREES TO:

PLANS FOR PROCESSING: Teacher processes with the following, or similar, questions to be discussed by the group: What things did your group do well together? What things did your group have trouble doing? How could your group improve next time you work together? How did you feel working with this group? Teacher/observer shares observation(s) sheet with the group to verify their impressions. Students will select a goal for next time and complete the goal sheet.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS:

Lack of understanding and ability to use deductive reasoning.
Frustration with problem-solving process.
Insufficient time.
Lack of using appropriate social skills.

OBSERVED PROBLEMS: Difficulty with using deductive thinking as a process. Frustration in not knowing how to begin to solve the problem.

POSSIBLE INTERVENTIONS:

1. Discussion of deductive reasoning strategies and having class work problem as a group
2. Provide a table with names and jobs listed
3. Assist groups with strategies (getting started)

ACTUAL INTERVENTIONS:

1. Provided each group with a problem solving grid
2. Assisted groups

EVALUATING OUTCOMES

TASK ACHIEVEMENT: Groups will receive a group score based on completion of task and the frequency of demonstrating designated social skills.

GROUP FUNCTIONING: Observation sheets will be filed by group as will goal statement for next time. These will be used in processing after next group activity

SUGGESTIONS FOR NEXT TIME: Repeat the activity with a different (more difficult) "Mind Bender" puzzle. Hold class discussion of strategies that could be used in solving these types of problems. Review each group's selected goals prior to next activity.

FACTS IN FIVES

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GRADE LEVE: Intermediate SUBJECT: Language Arts

GROUP SIZE: Twenty-eight students divided into groups of four.

ASSIGNMENT TO GROUPS: Use of a deck of cards matching suits for roles as well as for grouping by numbers.

MATERIALS NEEDED: A matrix that is five by five.

SETTING THE LESSON

TASK STATEMENT: "In your groups, you are to come up with an object in each category listed at the top of the matrix that begins with each letter listed at the side."

GROUP GOAL: Whole group participation.

CRITERIA FOR SUCCESS: A completed matrix within the time frame allotted.

SPECIFIC BEHAVIORS EXPECTED: One matrix requires all students to lean in and listen, to take turns suggesting possible answers, and to collaboratively decide the best answers for the matrix.

THE LESSON

MANAGEMENT SUGGESTIONS: Use a timer to set amount of time in which to complete matrix.

PROCEDURES: At random, students identify five letters of the alphabet. These are placed down the sides of the matrix, one in each box. Pick five categories to go across the top, one in each box. Where the letter and the category intersect, students write in the name of something that begins with that letter.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: All students enthusiastically on task; numerous answers generated.

OBSERVATION FORMAT: Will use matrix type observation form.

OBSERVER(S): One student observer to check for possible difficulty and assist.

PLANS FOR PROCESSING: Student observer in the group will tally turns taken, and group will assess their success in taking turns and leaning in.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: One student responding more than another, identification of alphabet letters that are too difficult for the categories, with too few possibilities in the classification.

OBSERVED PROBLEMS: Too difficult to use the letters Z and Q.

POSSIBLE INTERVENTIONS: Permit a change in letter after the group is started, and has tried unsuccessfully to identify items in the classification.

ACTUAL INTERVENTIONS: See above.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Group with most squares in the matrix completed, receives group points.

GROUP FUNCTIONING: There are five minutes in which to complete the task; members enthusiastically participated, and answers generated were interesting. Students particularly liked the group's consensus of most unusual items discovered in the classification.

NOTES ON INDIVIDUALS: Recorders were quick and enjoyed the activity.

SUGGESTIONS FOR NEXT TIME: Explore other categories for classification, or tie the classifications into the curriculum--perhaps social studies facts.

TEAM NAME ______________________________

TABLE# ________

FRUIT	TOYS	CITIES	ANIMALS	SPORTS

IDENTIFYING DENIAL

Sue MacLean
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GRADE LEVEL: 5th and up SUBJECT: Language Arts

GROUP SIZE: 5 per group.

ASSIGNMENT TO GROUPS: Count off, 1,2,3,4,5, 1,2,3 etc.

ROOM ARRANGEMENT: Sitting in a circle, or two people directly facing the other two with one person at the end facing all of them.

MATERIALS:

- One pencil.
- One script.
- One student checklist for evaluation per group.
- Teacher will need chalkboard, chalk, role chart, chart paper for writing how *Active Participation* and *Encouragement* "look" and "sound", and observer's sheet.

SETTING THE LESSON

TASK STATEMENT: We are going to learn how to encourage each other and to exchange ideas in our group while we discuss how people react to stressful situations by something called "denial".

GROUP GOAL: You are going to contribute and ask others for ideas while actively listening and encouraging each other. You need to complete the script and present it to the entire audience. Complete the questions about the script first so that you really understand the characters.

CRITERIA FOR SUCCESS: Positive feedback will be given from the audience when asked to share an encouraging comment. Completion of task and good self evaluation will occur. All successful groups will be reinforced with praise or concrete reinforcers.

SPECIFIC BEHAVIORS EXPECTED: Listening, participating, encouraging each other, using quiet voices.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Determine groups by counting off.
2. Explain the roles of reader, writer, checker, encourager, and summarizer. Allow two to three minutes for each group to determine who will have each job. Record on role chart.
3. Suggestions from large group as to what *Active Participation* and *Encouragement* "look" and "sound" like. Record responses on large chart paper.

PROCEDURE:

1. Each group will receive one directions sheet and one script. (See end of lesson plan.)
2. The reader in each group is to read the script out loud.
3. Each group should discuss the script following the questions on the directions sheet. The writer records the group responses.
4. When the questions are completed, the group is to decide how the characters would respond in such a situation and suggest their actions and verbal responses.
5. When all groups have come to this point, they are to select members to enact the roles of each character in their assigned scripts. Each group will present their completed script to the large group.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: See group self evaluation student checklist. They will have agreeably selected their roles of reader, writer, checker, encourager, and summarizer.

STUDENT CHECKLIST

As a group, decide how you did in your group lesson. Answer the following questions after discussion with your group.

1. We contributed our ideas. ____________
2. We asked others for their ideas. ____________
3. We actively listened to each other. ____________
4. We encouraged each other. ____________
5. We used quiet voices. ____________

OBSERVATION FORMAT: Check the number of times we hear ideas being exchanged and how much encouragement is given. Note special observations on those having difficulty functioning within the group.

OBSERVERS EVALUATION SHEET

1. Did they complete the task?
2. Did they actively participate?
3. Did they encourage each other?
4. Did they use quiet voices?

OBSERVER(S): Teacher.

PLANS FOR PROCESSING: Record and state the positive comments heard in the groups. Notice body language of individuals within the group.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Individuals may not want to participate or use encouraging words in the group setting.

OBSERVED PROBLEMS: Some students were embarrassed to contribute ideas or perform.

POSSIBLE INTERVENTIONS: Model a positive comment you heard in a group. "Let's see how this group can solve this difficult problem agreeably. I'll check back in a few minutes."

ACTUAL INTERVENTIONS: Find something positive to comment on about the group, for example, "I like the way______________ is contributing to the group." "It's nice to hear those encouraging words."

LESSON EVALUATION

NOTES ON INDIVIDUALS: Meet later with those students on whom the observer made special notes.

SUGGESTIONS FOR NEXT TIME: Students will write their own scripts. Students may require more complex situations. Lesson may be adapted to various levels. The next time the lesson is taught, the students will modify the script to show how each character can have a more beneficial outcome.

IDENTIFYING DENIAL

Discuss the scripts using the following questions.

What was the situation that caused denial?

What did each character have a hard time facing?

How did each character deny the situation?

How is denial helpful to each character?

What feelings did each character experience?

Do you know someone who has had a hard time facing something?

Team members are:

SCRIPT A

TOUGH TOM WAITED IMPATIENTLY UNTIL THE TEACHER FINALLY HANDED HIM HIS REPORT CARD. HE GRABBED THE CARD AND STUCK IT IN HIS POCKET, SHOVED HIS WAY OUT THE DOOR AND HEADED FOR HOME. WHEN NO ONE WAS AROUND, HE RIPPED OPEN THE ENVELOPE AND YANKED OUT THE GRADE SLIP. HIS EYES SCANNED THE CARD FOCUSING ON THE "F" IN READING. TOM QUICKLY TORE UP THE REPORT CARD, THREW IT DOWN IN THE GUTTER AND HEADED FOR HOME.

WHEN HE WAS INSIDE THE HOUSE HE YANKED OPEN THE REFRIGERATOR AND SHOUTED TO HIS MOTHER, "WHERE'S THE ORANGE JUICE YOU SAID YOU WOULD BUY FOR ME?"

"DIDN'T YOU GET YOUR REPORT CARD TODAY?" SHE REPLIED.

TOM: ____

____

____

MOM: ____

____

____

TOM: ____

____

____

MOM: ____

____

SCRIPT B

LOGICAL LARRY WAS IN HIS ROOM STUDYING BLOOD SAMPLES UNDER HIS MICROSCOPE WHEN HIS MOM CALLED HIM FOR DINNER. AS HE AND HIS FAMILY SAT DOWN TO EAT, LARRY LOOKED AT THE VEGETABLE PLATE AND SAID, "MOM, IF YOU WOULD COOK THE VEGETABLES IN THE MICROWAVE INSTEAD OF BOILING THEM, THEY'D RETAIN THEIR CRISPINESS AND NUTRIENTS. THERE'S NO SENSE IN EATING THESE -- ALL THE VITAMINS ARE GONE. AND SPEAKING OF NUTRITIOUS FOODS, YOU SHOULD SEE WHAT MY TEACHER BRINGS FOR LUNCH --POP TARTS, FRITOS AND A COKE!"

LARRY'S FATHER SET DOWN THE NEWSPAPER HE HAD BEEN READING, LOOKED UP, SMILED AND SAID, "WELL, WHERE'S THE REPORT CARD?"

LARRY: IT'S RIGHT HERE. I GOT 3 "A'S" AND A "D" IN HEALTH BECAUSE THE TEACHER DON'T KNOW ANYTHING ABOUT HEALTH OR NUTRITION.

DAD:

LARRY:

DAD:

SCRIPT C

SENSITIVE SARAH STOOD AT THE TEACHER'S DESK WAITING TO ASK IF SHE COULD GO TO THE NURSE'S OFFICE. HER STOMACH HURT. HER TEACHER TOLD HER, "TAKE YOUR SEAT, SARAH. THE FINAL BELL RINGS IN TEN MINUTES. I WILL BE HANDING OUT REPORT CARDS, AND THEN YOU MAY GO HOME." SARAH SAT AT HER DESK POUTING WHILE SHE WAITED. WHEN HER NAME WAS CALLED, SHE GAVE THE TEACHER AN EVIL STARE AND TOOK HER REPORT CARD. ON THE WAY HOME SHE STOPPED TO LOOK AT HER GRADES. THE "D" IN MATH JUMPED OUT AT HER. "HOW COULD SHE DO THIS TO ME?" SHE THOUGHT. "I WORKED SO HARD IN MATH! I STUDY MORE THAN EVERYONE PUT TOGETHER!" SHE WALKED INTO THE HOUSE, HANDED HER MOTHER HER REPORT CARD AND WENT STRAIGHT TO HER ROOM. THEN, SHE SHUT THE DOOR AND FLOPPED ONTO HER BED IN A POOL OF TEARS. HER MOTHER KNOCKED GENTLY ON HER DOOR.

MOM: ______________________________

____

____

SARAH: ______________________________

____

____

MOM: ______________________________

____

____

SCRIPT D

DEPENDABLE DONNA, EAGER TO PLEASE, SAT QUIETLY IN HER SEAT WAITING FOR HER REPORT CARD. SHE TUCKED IT CAREFULLY INTO HER NOTEBOOK AND HEADED FOR HOME. ONCE SHE ARRIVED, HER MOM SAT DOWN TO GO OVER HER GRADES WITH HER. THERE WERE MOSTLY "B'S" WITH A FEW "A'S" IN HER FAVORITE SUBJECTS. DONNA'S MOM SMILED PROUBLY AND SAID, "GOOD WORK, HONEY! AREN'T YOU EXCITED?" DONNA REPLIED, "BUT WHAT DID SHE SAY? WHAT DID THE TEACHER WRITE AT THE BOTTOM?"

DONNA'S MOM READ THE COMMENT: "DONNA NEEDS TO SPEND MORE TIME TAKING CARE OF HER OWN RESPONSIBILITIES RATHER THAN THOSE OF HER FRIENDS."

DONNA'S SMILE FELL IN HER LAP AS HER CHEEKS GREW HOT AND HER EYES BURNED WITH TEARS.

DONNA: WHY WOULD THE TEACHER SAY THAT? I DON'T TALK TO MY FRIENDS - THEY TALK TO ME!

MOM:

DONNA:

MOM:

WRITING COMPLETE SIMPLE SENTENCES

Ann Bruhner
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Oakley Union Elementary District
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GRADE LEVEL: 5th - 12th grades SUBJECT: Language Arts

GROUP SIZE: 2 students (pairs).

ASSIGNMENT TO GROUPS: Students should be assigned so that their scores on their daily papers will be closely equal. First, assign the very top student (one who can teach well) and the lowest student to one team; assign the next highest and next lowest student to the next team; continue in this manner until the last team consists of two fairly middle students. Take care not to assign students together who will find other playful activities to do or students who are both shy.

ROOM ARRANGEMENT: Any normal classroom arrangement that will allow total group instruction at the beginning of each session. Places for pairs to work together while talking softly will work.

MATERIALS: One copy for each student of the following papers:

1. SUBJECT-VERB IDENTIFICATION PROCEDURE
   (Taken from Sentence Writing Strategy KU-IRLD)
2. Practice Simple Sentences Set I
3. Example Set II
4. HELPING VERBS
5. Example Set III
6. Example Sheet IV
7. Example Sheet V
8. Example Sheet VI
9. Simple Sentence Lesson A
10. Simple Sentence Lesson B
11. Observation Sheet

SETTING THE LESSON

TASK STATEMENT: "Today we are going to learn to find subjects and verbs in sentences. First we are going to learn about two kinds of verbs, then we will learn about five different kinds of subjects."

GROUP GOAL: "You are to help your partner as much as you can so that you both get the most points for your team. You should teach your partner what you know so that your partner can pass a test on what we learn. You can earn points in the following ways:

- You can earn 10 points if both you and your partner are listening, writing down information when you are asked, and asking questions in your heads and out loud. Did you know that I can see, by the way you sit and the look on your face, when you are thinking about what I am teaching?
- You can earn points for each time you are asked to give an answer. Sometimes you can look at your paper or the board for help and sometimes you must remember what we have been learning.
- You can earn points for all the things you write down."

CRITERIA FOR SUCCESS: Academically each student should reach 90% accuracy or better. You may make up more worksheets for any area which needs practice. You may change the teams if they are working very poorly, but do not change more than once near the beginning of the lesson. If a student is not performing well, and the rest of the class is doing well, you may tutor that student at another time.

Socially, students should talk to each other in a helpful way and act as a caring partner to the other student on the team. You can encourage feelings for partners by your remarks and by taking partners aside for extra coaching, secretly, etc.

SPECIFIC BEHAVIORS EXPECTED: Students will talk to their partners, in a helpful way, acting as a caring partner.

THE LESSON

MANAGEMENT SUGGESTIONS: "Today we are going to learn to find subjects and verbs in sentences. It is something we need to know so that we can talk in the same language to each other. Can any of you talk in dog language? Do you know what a dog means when he talks? I want to teach you a language that will help us speak to each other about writing very good sentences later on. Why do you think it would be good to write very good sentences? Would it help your grades in school? Would it help you to write better letters to your friends? Would it make you sound as smart as you really are?"

"First we are going to learn about two kinds of verbs, then we will learn about five different kinds of subjects, and then we will learn how to find them in sentences. Do you know anything about verbs?"

Write down all information that the students give you; organize it into areas of general information (phrases), specific verbs that are action, state of being or helping verbs (if those are given).

PROCEDURE:

1. "We have talked about ACTION VERBS, that they are things that you can do. Use one piece of paper. One of you may write, or you may change so that you both write. Make one list of as many ACTION VERBS as you both can think of. Begin when I say go; stop when I say stop. Do you need to know something more before you begin? You will earn one point for each correct ACTION VERB that you and your partner write. BEGIN."

2. "STOP" Ask each team to read their list and to mark a "C" by each one that you say is correct. Elicit class discussion of why an unusual verb is an action verb or why a word is not an action verb. Ask teams to count their words. Write team scores on the board.

3. Ask each team to write the following list of State of Being verbs on a piece of notebook paper. (All papers can be kept in a special folder for each student if you have one available or can make one out of construction paper.)

STATE OF BEING VERBS
(Insist on the separation between letters of the alphabet.)

am
are
be
been
become
is
seem
was
were

4. Explain that these are verbs, but we need to remember them because they are not something we do. Tell students that they can look at this list whenever they need to, but that they can earn team points if they learn it.

5. Help students learn by asking how many "a" words there are; what are they; "b" words; what are they, etc. Ask students for all "a" words, "b" words, etc. (while looking at papers); ask for words while looking away, but looking if they cannot remember; ask for words while papers are hidden. (Give points for each team member who can say the list with no cues of any kind from you: give time to study with team partner if necessary.

6. Use the SUBJECT VERB IDENTIFICATION PROCEDURE PAPER. Pass it out to each student. Ask a student to read the step. Ask a student to read the example sentence. Ask the whole group to find the verb and say it. Ask them to undeline it with two lines. Ask a student to read story 2. Demonstrate asking "Who reported the theft?" Whole group responds. Ask students to underline the answer. Point out that the answer is the subject. Do the next example: find verb, underline with two lines, ask question; underline subject with one line.

7. Ask students to use the bottom of the State of Being list to write down the five kinds of subjects:

	SUBJECTS
person	(John, President Reagan, Mr. Johnson, etc.).
place	(San Francisco, school, the park).
thing	(apple, pencil, desk).
quality	(intelligence, honesty, cleanliness).
idea	(war, peace, love).

   Elicit examples of subjects for each of the five kinds and ask students to write them next to that kind.

8. Give points to each team for the way in which they followed the lesson. If each team can earn 10 points, this is the best procedure, but do not give 10 points to a team that was not participating well. Explain your reason for giving points to each team. Give compliments.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Student pairs will:

- List action verbs.
- List state of being verbs.
- List five kinds of subjects.
- Identify subject and verb of a given sentence.

OBSERVATION FORMAT: Attached.

OBSERVER(S): Observations should be made by the teacher concerning the student's interactions with others. These should be specific and anecdotal rather than judgemental. Example: "I remember that you told Jack that his idea helped you find the verb screamed in sentence five."

PLANS FOR PROCESSING: During the team practices and during the group lessons, write down good examples of partnership anecdotally, and share these specific examples with the whole class daily.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Students will interact incorrectly.

POSSIBLE INTERVENTIONS: Intervene when students are interacting incorrectly and model appropriate behavior. Point out when students help by asking another student a question rather than by telling him the answer. Point out when students watch their partner do a sentence with rapt interest. Show them how they look and how you know they were thinking by their look.

LESSON EVALUATION

SUGGESTIONS FOR NEXT TIME:

DAY 1

1. Review the previous lesson by asking for the State of Being verbs by each letter, by whole list, etc. Ask for the steps in finding the subject and verb. (Use a few sentences on the board: John ran away with the ball. Jane ran after him. She caught him out in the field.)

2. Give students Practice Simple Sentences Set I, one to each team. Ask teams to find the verbs, ask the question and find the subject; two lines for verbs, one line for subjects.

3. Ask students to help each other learn so that their team can win points later when each student does a paper by themselves; Students do only top 10. Cut off bottom 10 if you wish. These are used for individual work later.

4. Go over each sentence, allowing teams to make corrections and ask questions. On each sentence, allowing teams to make corrections and ask questions. On each sentence, ask for verb, question, subject. Emphasize two lines for verb, one line for subject.

5. You are to find the verb, ask the question, and find the subject. The verb gets two lines, the subject gets one line. You are to work alone and do your best so that your team can get two points for each sentence for each one of you.

6. Students trade papers with another team. The person correcting writes his name at the bottom of the paper. Correct by asking for verb, question subject. Go around the group in order for reinforcement of the procedure.

7. Ask correcting student to give two points for each totally correct sentence and one point if either subject or verb is correct. Correcting student adds up the points and returns the paper to the team. They verify the score and add the team score. You add to scores from previous day and give scores for working well as a team.

DAY 2

1. Write the following sentence on the board: *The big fat, scary elephant bellowed at us*. Ask the students to find the verb and you draw two lines under it.

2. Explain that now we are going to look for the head word of the subject. Cover "the". Read the sentence. Ask if the students know who bellowed at us now. cover "big". Read the sentence. Ask if they can still tell who bellowed. Continue with this exercise covering "fat" and "scary". Show students that covering "elephant" would not allow them to know who bellowed at us. Explain that "elephant" is the head word. It is the most important word of the subject. It is the only one to be underlined with one line.

3. Give out Example Set II. Tell students to work on one paper per team. Underline the verb. Ask the question. Underline the head word of the subject. Do the top ten sentences.

4. Correct team papers by going around the group. "What is the verb?" "What is the question?" "What is the head word of the subject?" Change any wrong answers. Encourage students to ask questions and to argue over their answers. Give points if you need to encourage these activities.

5. Ask students to do the second ten sentences alone. Give each student a paper.

6. Correct by exchanging with another team. Write name of corrector on paper. correct by going around the group: verb, question, head word of subject. Return papers. Verify scores. Add team scores. You add scores to previous scores.

DAY 3

1. Review State of Being verbs, concept of Action verbs. List some. Give examples of the five kinds of subjects. Do steps in finding verbs and subjects. Do this by going around the whole group and asking one student after another. Allow study time if needed.

2. Present the concept of Helping Verbs. Give analogy of helping someone to the office if they are hurt. Elicit examples to go with am (am going), are (are going), etc. Students write them on their Helping Verbs lists you have given out.

3. Write this example on the board:

   I must have been crazy about popcorn.

   Ask students to find all three verbs and underline them with two lines. Point out that they all help each other to say one thing. Put another example on the board:

   I am going swimming today.

   Have group find all three verbs and underline them. Point out how they help each other to say one thing.

4. Give out top half of Example Set III. Ask teams to complete one paper per team by finding the verb, asking the question, finding the subject.

5. Ask students to trade off one sentence, then another, so that they each get enough practice. Elicit how students practice being good teachers to each other, pointing out things, being supportive of each other, making sure that the other person understands. Point out that you will be watching to see that each team does these things.

6. Correct orally: verb (all helping verbs included), question, subject. Encourage discussion.

7. Point out the ways with specific examples that you saw team members being good teachers. Try to include a comment for each person or at least each team.

8. Hand out bottom half, one to each person, to be done individually.

9. Exchange papers with another team and correct orally. Score. Hand back papers. Verify score. Add team's scores. You add to ongoing team score. Make comments about good ways of discussing points of difference between scorer and person owning paper, etc.

10. Ask students ways in which they have learned to be good teachers, ways in which people have dealt with them fairly, ways in which they need to improve.

11. Ask students to recall what they have learned about subjects and verbs and about finding them in sentences.

DAY 4

1. Review orally previous lessons.

2. Review ways of being good teachers.

3. Teach compound verbs by putting the following sentence on the board:

   Mr. Jones and his cat were very friendly.

   Find the verb. Point out that there are two verbs . Point out that there are two subjects, "Mr. Jones" and "cat". Name this a compound subject.

4. Give out top half of Example Sheet IV for teams to do on one paper. Review expectations academically. Review ways to help your partner learn more.

5. Correct orally. Pass out individual bottom half of page.

6. Exchange, correct orally. Score, total, verify. Total team's scores.

7. Review things you saw that were good team operations for good learning. Ask for students to recall good events and things to improve.

DAY 5

1. Review orally previous lessons.

2. Review ways of being good teachers.

3. Teach compound verbs by putting the following sentence on the board:

   Jack ran and jumped over the fence.

   Ask students to find the verb. Point out that there are two verbs. Point out that "and" is between them and acts as a signal that there are two verbs, compund verbs.

4. Pass out Example Sheet V and VI. Ask teams to do the first five together.

5. Correct orally.

6. Ask individuals to do the last five sentences.

7. Exchange and correct orally. Total, verify, total team's scores.

8. Point out good examples of good partner cooperation. Ask students to think of good examples. Ask students to think of places to improve.

DAY 6

1. Teach about sentences with both compound verbs and subjects. Put this example on the board:

   Mr. Federicks and Mr. Jacobs were playing tennis and laughing about their mistakes.

   Point out that "and" is the key word between the subjects and between the verbs.

   subject **and** subject verb **and** *verb*

2. Ask teams to do the first five sentences of Example Set VI.

3. Correct orally.

4. Ask individuals to do the last five sentences.

5. Exchange, correct, verify, total team's scores.

6. Review good team practices.

7. Review all learning. Elicit information from students.

8. Point out good examples of good partner cooperation. Ask students to think of good examples. Ask students to think of places to improve.

DAY 7

1. Review all of the six kinds of sentences that have been taught by putting the following sentences on the board:

   Jack ran to the store.

   The furry little white kitten mewed loudly.

   The clown must have been crying after the circus.

   Jerry and Virginia walked home last night.

   George drank coke and ate popcorn all through the movie.

   Mark and Jane screamed and yelled about the ice.

2. Go through them orally and discuss the ways in which they are different from each other. Reinforce "and" as a signal word between subjects and between verbs.

3. Give out Simple Sentence Lesson A to teams, one per team. Ask them to do their very best teaching of each other in order to be able to do a mixed up paper individually. Review ways in which they can help each other.
4. Correct orally and discuss any areas of doubt and reinforce any areas of need.
5. Pass out Simple Sentences B for individuals to do.
6. Correct after exchanging. Total, verify, and total team's scores.
7. Discuss all that has been learned about being good team members.
8. Discuss all that has been learned about finding subjects and verbs.

OBSERVATION SHEET

(May be used for students or teacher to fill out).

Things that made my partner a good teacher:

1. ____
2. ____
3. ____

Things that made me a good teacher:

1. ____
2. ____
3. ____

Things that my partner could work on:

1. ____
2. ____
3. ____

Sentence Writing Strategy — Cue Card #4

SUBJECT - VERB IDENTIFICATION PROCEDURE

Step 1: Look for the action or state-of-being word to find the verb.

Example: Kevin reported the theft.

Step 2: Ask yourself "Who or what (verb) ?" to find the subject.

Example: Paula is an astronaut.

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Sentence Writing Strategy

Cue Card #5

HELPING VERBS

am
are

can
could

do
does
did

has
have
had

is

may
might
must

shall
should

was
were
will
would

be
been
being

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SUBJECT-VERB IDENTIFICATION

Practice Simple Sentences Set I

1. Mickey Mouse went into the spaceship.
2. He is a very intelligent mouse.
3. Computers crowded the little module.
4. He loves weightless space.
5. Rockets are very powerful.
6. NASA is very careful.
7. Space food tastes terrible.
8. NASA has a shuttle named Columbia.
9. Stars are in view everywhere.
10. Comets race through the sky once in a while.

Practice Simple Sentences Set I

1. A gopher popped into a hole.
2. He was a very shy animal.
3. Stones tumbled down into the tunnel.
4. He hates big pebbles.
5. Gophers are very clean animals.
6. They are very cautious.
7. Gophers taste good to a cat.
8. The school has a cat named Oakley.
9. Gophers are inside their holes everywhere.
10. Cats chase gophers into their holes sometimes.

Adapted from the *Sentence Writing Strategy, Students Lessons* by Jean Schumaker with Jan Sheldon. Lawrence, Kansas: University of Kansas, Institute for Research on Learning Disabilities, 1985.

EXAMPLE SET II

1. The funny yellow dog galloped around the yard.
2. The golden-haired singer hummed a tune.
3. Jerry's pocket knife broke yesterday.
4. The last five puppies wiggled.
5. Twenty-five busy students whispered in the classroom.
6. The captain of the ship shouted orders.
7. A re-enameled pin sparkled in the showcase.
8. The cheerleaders in the eighth grade sold pins to the school.
9. The boy's broken leg ached all night long.
10. The tree's longest branch blew off in the wind.

EXAMPLE SET II

1. The little yellow daisy drooped in the hot sun.
2. The quick-footed deer climbed the mountain.
3. Mary's baby doll cried real tears.
4. The first two Easter eggs broke.
5. Twenty-one boys came to the party.
6. The gold-plated watch gleamed on my arm.
7. The president of our class called the meeting to order.
8. The paper in that box is the best of all.
9. The painted wood looked the best.
10. George's biggest dog yelped at us every day.

Adapted from the *Sentence Writing Strategy, Students Lessons* by Jean Schumaker with Jan Sheldon. Lawrence, Kansas: University of Kansas, Institute for Research on Learning Disabilities, 1985.

EXAMPLE SET III

1. The train must have come yesterday.
2. Her little friend could not play today.
3. The Brentwood-Oakley game has been played.
4. The herd of cattle is grazing on the far hill.
5. The little calf is not following her mother.
6. The bag of small candies should not have been left there.
7. The happy car salesman would have given us a better deal.
8. A funny smile could have convinced the judge.
9. The peel of the orange was falling on the ground.
10. The romantic valentine might have been mailed today.

EXAMPLE SET III

1. The policeman must have gone home.
2. His worst enemy could not make him mad tonight.
3. The dark red sofa should have been cleaned yesterday.
4. The team of scuba divers is practicing in the river.
5. Mary's Dad is not coming to get her today.
6. The little red train should not have been on the shelf.
7. The sad train conductor would have given you the seat.
8. A long rope could have been used on the package.
9. The edge of the table was cracked last year.
10. The Walt Disney movie might have been lost today.

Adapted from the *Sentence Writing Strategy, Students Lessons* by Jean Schumaker with Jan Sheldon. Lawrence, Kansas: University of Kansas, Institute for Research on Learning Disabilities, 1985.

EXAMPLE SHEET IV

1. Mark and Jessica want to go to McDonald's.
2. Jean and her sister look alike.
3. Are you and your friend having a party?
4. The bed and the rug are covered with old clothes.
5. Aerobics and soccer are the favorite classes.
6. The red dog and his yard have been favorites of mine for years.
7. The computer and the printer become hot after a while.
8. Spaghetti, pizza, and tacos are my favorite foods.
9. Apples and oranges are both good to eat.
10. Did the cat and the dog run out of the yard?

EXAMPLE SHEET IV

1. Mary and George want to go to the beach.
2. Jack and his family work in the garden.
3. The roof and the yard are covered with hail.
4. Are the cat and the dog running around?
5. Talking and writing notes are fun things for some students to do during class.
6. The old tree and the squirrel have been good friends for a long time.
7. The planets and the stars become dim to us in the morning.
8. Jack, Jane, and Bob want to own Ferraris.
9. Hate and love are the opposite of each other.
10. Did Jerry and Grace move 100 miles away?

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EXAMPLE SET V

1. Sally swam and played all afternoon.
2. The dogs had barked all night and slept all day.
3. Michelle came home yesterday and did not work all day today.
4. The basketball team rode on a bus and flew in a plane to attend the game.
5. The park is dark and spooky at night and can be delightful on sunny days.
6. Did Jane call her father and tell him the news?
7. I miss my sister and want to see her again soon.
8. Children should not be allowed to watch T.V. and should be encouraged to play.
9. Will you sit by the sea and paint the ships?
10. The books were stacked on the floor and were ruined by the flood.

EXAMPLE SET VI

1. The ponies and calves scampered and played in the field.
2. Kathy and her father do not like to play tennis and hate to jog.
3. The Army and the Navy had a football game and filled the stadium.
4. The two boys and their fathers were sick and did not attend the Father-Son Banquet.
5. Parties and dances are usually fun and can be thrilling.
6. Cards and dice were used at the party and had been scattered everywhere.
7. Radio towers and tall buildings must have lights and must be visible at night.
8. Candles and flowers can brighten the table and can make guests feel special.
9. Tape and string are needed to secure packages and can be used for other things.
10. The graduates and their parents posed for pictures and celebrated with a party.

Adapted from the *Sentence Writing Strategy, Students Lessons* by Jean Schumaker with Jan Sheldon. Lawrence, Kansas: University of Kansas, Institute for Research on Learning Disabilities, 1985.

SIMPLE SENTENCES A

1. The pie and cookies disappeared quickly.
2. The boy ate too many cookies and got sick.
3. You and James could come over tonight.
4. The people danced and drank punch until midnight.
5. The paperboy and the milkman come early in the morning.
6. Success in football will be decided by the coach.
7. Mary and I are angry and want an apology.
8. Chip went around the building.
9. Illness and loneliness are terrible things.
10. Rick and his girlfriend had fun at the dance and walked home afterwards.

SIMPLE SENTENCES B

1. I should have the letter by tomorrow.
2. Those black beetles could have flown from that tree and landed on this table.
3. The silver plane dove down over the houses.
4. Beauty is a part of the person and can be misjudged easily.
5. France and England had an agreement and fought together in the war.
6. The spacemen and their strange friends sipped cokes.
7. My strange brother sleeps all day.
8. A snake and a toad were out in the hot sun.
9. Jonathan and Marie ate chocolate cake and drank milk.
10. Fred threw the football and blocked the next runner.

Adapted from the *Sentence Writing Strategy, Students Lessons* by Jean Schumaker with Jan Sheldon. Lawrence, Kansas: University of Kansas, Institute for Research on Learning Disabilities, 1985.

GARDEN PLOT

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Perris, CA

GRADE LEVEL: 7th-8th SUBJECT: Reading/Language Arts

GROUP SIZE: 35 students divided into groups of 4 members each.

ASSIGNMENT TO GROUPS: Students submit requests (at least five names). Everyone gets to work with one requested classmate.

ROOM ARRANGEMENT: Desks in traditional rows before and after actual group work; in clusters of four during group work.

MATERIALS NEEDED: Garden Plot worksheet.

SETTING THE LESSON

TASK STATEMENT: "From the given clue cards, place all vegetables in correct position on the garden plot."

GROUP GOAL: Accomplish task with everyone reading only his/her clues and relying only on his/her group members.

CRITERIA FOR SUCCESS: Everyone stays seated with group, talking only to immediate group members the entire group time. Everyone reads his and only his clue cards.

SPECIFIC BEHAVIORS EXPECTED: "Stay seated in your group, talking only to people in your own group. Read only your own clue cards aloud to your group; do not read over anyone's shoulder or grab others' clue cards."

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Determine groups in advance from students' requested classmates list.
2. Review what *participating* and *encouraging* "look" and "sound" like.

3. Ditto clue cards, vegetable cards, and garden plot. Pass out all clues, vegetables and one garden plot to each group.

PROCEDURE: Explain to all students that each group is to place the vegetable cards in the correct position on their garden plot according to their clues. Each member is to read their clue card to the group but not show it to them.

Suggest that after the garden is laid out group members should reread their clues to double-check positions of vegetables.

At end of allotted time, reveal actual positions of vegetables either on chalkboard or large chart paper. Discuss how groups came up with correct positions.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Students stay seated in groups, talking only to their own group members, reading only their own clues.

OBSERVATION FORMAT: Checklist of behaviors expected.

OBSERVER(S): Teacher and student monitors.

PLANS FOR PROCESSING: Toward the end of group time teacher compares student monitor and teacher checklists, commenting to each group regarding this information. Entire class thumbs up-thumbs down on social skills from checklist.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: One or two students may take over. Solving the problem by themselves.

OBSERVED PROBLEMS: Students in some groups laid clue cards out on desk so everyone could read them.

POSSIBLE INTERVENTIONS: Collect all materials, questioning group on target social skills before letting them proceed.

ACTUAL INTERVENTIONS: Teacher simply reminded groups to read only assigned cards.

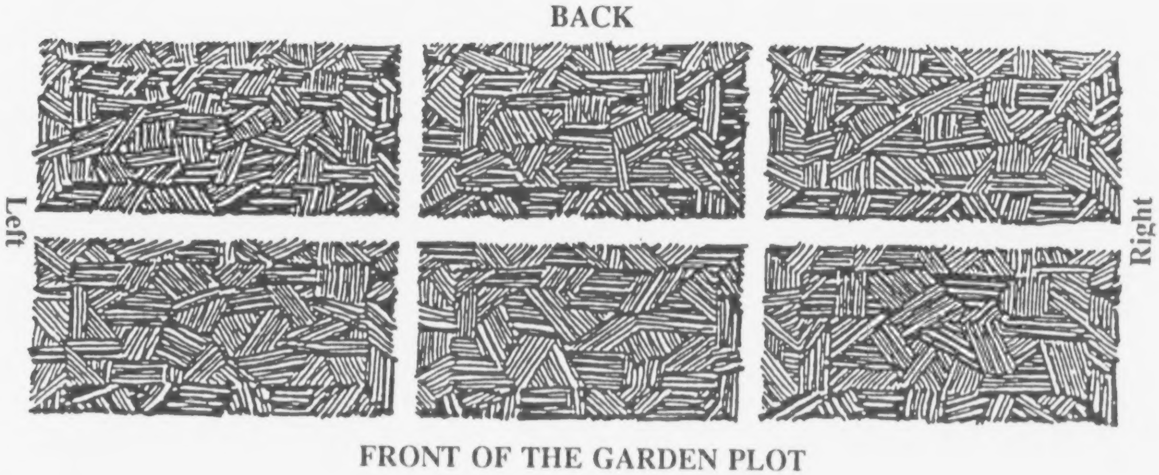
LESSON EVALUATION

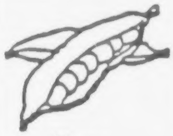
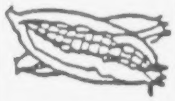
ACADEMIC TASK ACHIEVEMENT: Six out of eight groups solved the problem.

GROUP FUNCTIONING: Five groups functioned totally independently, needing no intervention, staying within guidelines. Three groups required teacher reminders.

NOTES ON INDIVIDUALS: One chronic problem student was enlisted as monitor. Several others need coaching and counseling on assertiveness or participation.

SUGGESTIONS FOR NEXT TIME: Stress ahead of lesson the specific instruction to avoid laying out all clue cards for all to read. Groups having much difficulty could be permitted to lay out the clue cards on the table toward the end of the period.



 Peas	 Melons	 Beans	 Tomatoes	 Corn	 Carrots

Garden
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The melons are to the right of the beans.

Garden
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The beans are planted in front of the corn.
- The peas are next to the tomatoes.

Garden
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The peas are next to the corn.
- The melons are to the right of the carrots.

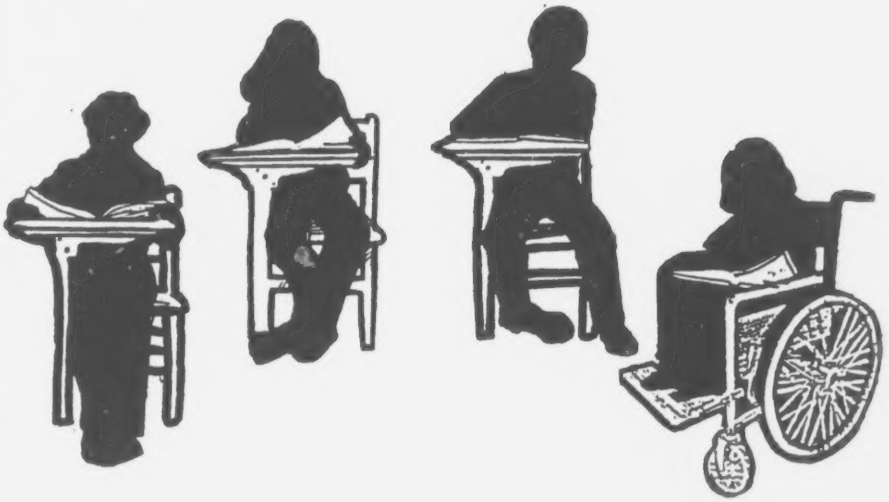
Garden
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The tomatoes are in back of the melons.

Garden*
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The carrots are in front of the peas.

Garden*
These are your clues to help solve the group's problem.
Read them to the group, but do not show them to anyone.
Problem: Which crop is planted in each of the sections of the garden?
- The carrots are next to the beans.

Cooperative Learning Lesson Plans

Math/Science



LET ME COUNT THE WAYS

Karen Martini
Our Lady of Miracles School
Project Aims
Gustine, CA

GRADE LEVEL: Primary SUBJECT: Math

GROUP SIZE: 3 students.

ASSIGNMENT TO GROUPS: Heterogeneous grouping - high/average/low skills in mathematics.

ROOM ARRANGEMENT: Students can gather around a desk, group at a small table, or each group can sit in a circle on the floor. Make sure there are spaces left between all groups.

MATERIALS NEEDED: Limit materials to one set per group.

- 1 piece of blank paper (for the sequencing graph).
- Primer balance.
- Worksheets A-C.
- Approximately 25 Teddy Bear counters.
- The following objects will be weighed: eraser, tennis ball, box of 8 crayons, clay ball, small block of wood.
- Extra Worksheets of C.
- The following will be needed to record with: crayons, scissors, and gluestick.

SETTING THE LESSON

TASK STATEMENT: Present the five objects that student will weigh. Ask "Which of these objects will weigh the most?"

GROUP GOAL: Group members will work with positive interdependence to determine the order of weight of the objects from the lightest to the heaviest.

DISCUSSION QUESTIONS

1. Which of the six objects was the lightest? Which was the heaviest? How do the strips show us which is heavier? lighter? the same?

2. "Is the _____ heavier that the _____ ? "How much more does the _____ weigh than the _____ ? "Can you find an object that weighs two more than the _______? "Can you find an object that weighs three less than the _____ ?

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

1. Complete their assigned tasks.
2. Complete worksheets A-C.
3. Be able to answer discussion questions.

OBSERVATION FORMAT:

Groups	Lesson: Maintenance Skill	Date: Task Skill

OBSERVER(S): Teacher should listen and record group comments and behaviors on Observation form.

CRITERIA FOR SUCCESS: Relate the graph, the sequence of strips to ordering the objects from light to heavy. If the graph shows a staircase, the sequence was accurate.

SPECIFIC BEHAVIORS EXPECTED: Before starting the activity have students brainstorm together what *giving ideas* and *encouraging others* "look" and "sound" like.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Collect the items listed in the Materials section.
2. Assign students to groups prior to class. Each group member can be assigned the task of weigher, colorer and cutter, or gluer before the activity.
3. Write the Student Processing sentences on the chalkboard. Each group will choose at least one sentence on which to report to the class after the lesson.
4. Review with the students what giving ideas and encouraging others "look" and "sound" like.
5. As students' names are called, they are to collect their materials and move into groups.

PROCEDURE: "Your group will work cooperatively to:

1. Make a record of your group's guess of how the objects would line up from lightest to heaviest by cutting out and gluing the pictures of the objects onto the chart provided under the heading OUR GUESS. (Worksheet A).
2. Start with the object your group thinks is the lightest. Estimate and record how many Teddy Bear counters you think it will weigh. (Worksheet B).
3. Use two colors of Teddy Bears counters to weigh the object. Count and record. Add the two colors to get the total weight. (Worksheet B).
4. Repeat for all six objects.
5. Color and cut out as many of the second set of pictures of objects (Worksheet C) as needed to create a Teddy Bear graph of the objects weighed. If you need extra Teddy Bear pictures, I have them ready for you.
6. Sequence the strips from few Teddy Bears to many Teddy Bears to show the order of objects from lightest to heaviest.
7. Title a separate piece of paper "Weigh and Count" and glue the strips side by side to produce a staircase effect.
8. I will be listening for how well you give ideas and encourage others in your group."

PLANS FOR PROCESSING: Students discuss the following in small groups then report back to the class:

1. We found that ___________ was the best way for us to make sure we were counting and recording correctly.
2. The social skill that we practiced regularly in our group was ___________.
3. In order to do a good job it is necessary to ___________________.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Groups members may not stick to assigned roles of weigher, gluer, colorer and cutter.

OBSERVED PROBLEMS: Students had difficulty encouraging each other.

POSSIBLE INTERVENTIONS: Post assigned tasks for each group member on board. Often the physical presence of the teacher near the group will facilitate members taking turns and fulfilling assigned roles.

ACTUAL INTERVENTIONS: The teacher "floats" from group to group reminding members what encouraging and giving ideas "look" and "sound" like.

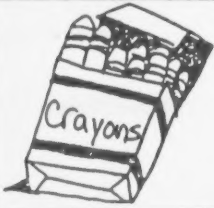
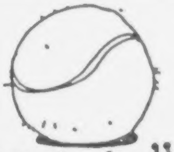
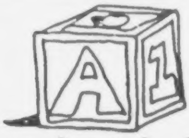
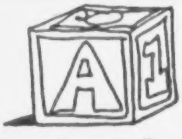
LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: All groups completed the tasks successfully.

SUGGESTIONS FOR NEXT TIME: Some experience with measuring by weight prior to the lesson is helpful. To encourage students to practice the social skills more consistently, you may want to do additional skills modeling, more team building activities, or more Cooperative Learning activities.

Let Me Count the Ways... A

Cut out the "My Guess" pictures. Glue or lay them in the chart from lightest to heaviest. Weigh and count. Cut out the "Weigh and Count" pictures. Glue them in the chart to show the resalts.

Our Guess:	Weigh and Count:
eraser	eraser
	
scissors	scissors
clay ball	clay ball
 tennis ball	tennis ball
 wooden block	 wooden block

✂- - - - - -

Our Guess:	Weigh and Count:
Lightest	Lightest
Heaviest	Heaviest

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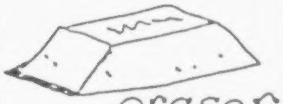
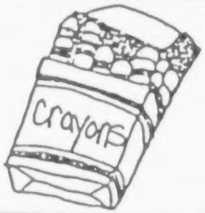
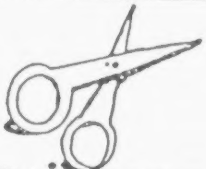
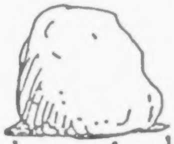
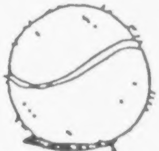
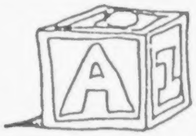
Let Me Count the Ways

Choose bears of only two colors to weigh each object.
Our two colors are ______ and ______.
Record the number and color of bears.

	Our Guess:	Weigh and Count:
 eraser	____ bears	____ + ____ = ____ bears
 Crayons	____ bears	____ + ____ = ____ bears
 scissors	____ bears	____ + ____ = ____ bears
 clay ball	____ bears	____ + ____ = ____ bears
 tennis ball	____ bears	____ + ____ = ____ bears
 wooden block	____ bears	____ + ____ = ____ bears

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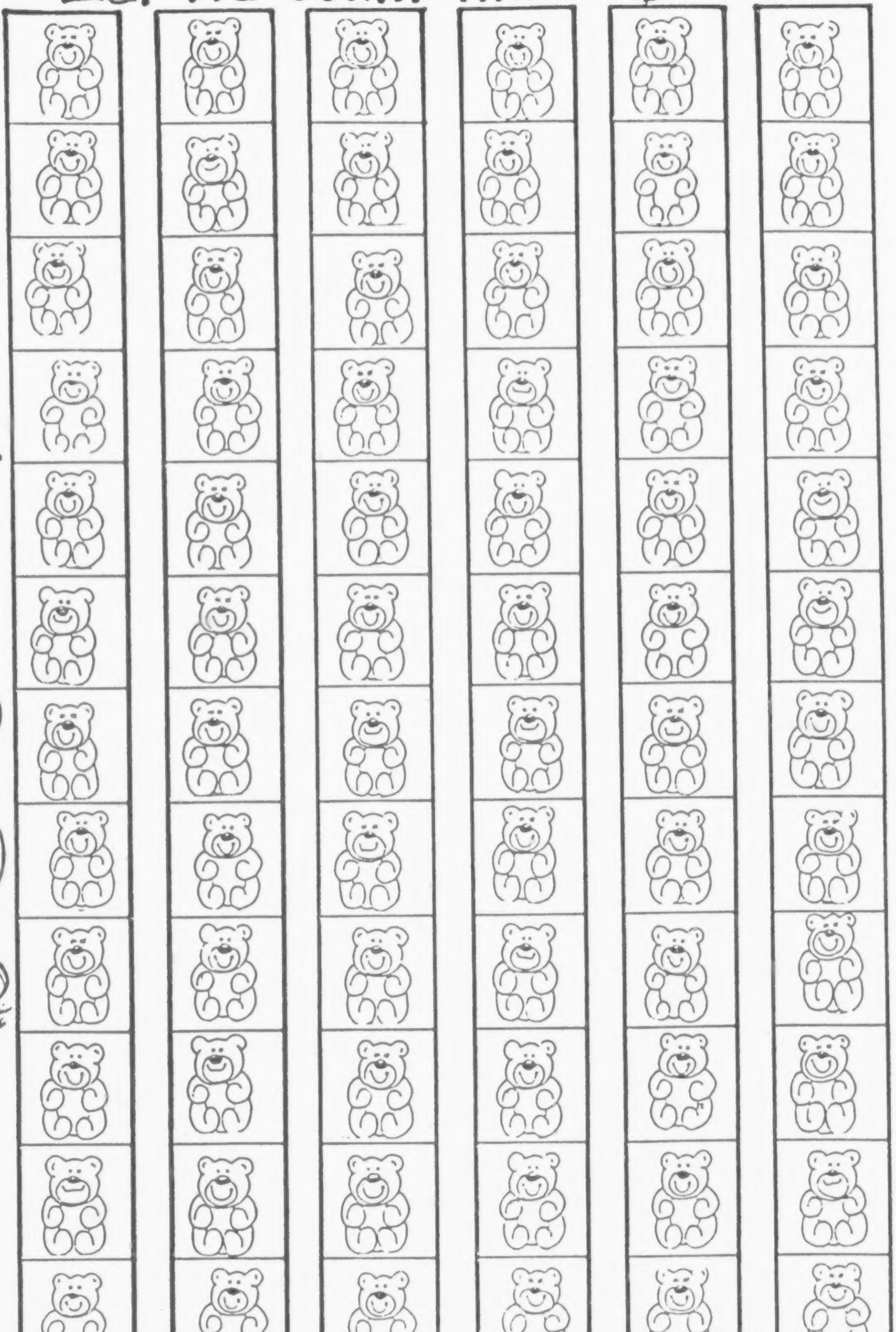
C

Let Me Count the Ways

1. Weigh and Count.
2. Count and Color.
3. Cut out each strip.
4. Put strips in order from few to many.

5. Glue the strips on another piece of paper.


eraser
crayons
scissors
clay
tennis
block

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GUMMY BEARS

Larry Eckland
Project AIMS,
Fresno Pacific College
Fresno, CA

GRADE LEVEL: Primary SUBJECT: Math Skills

GROUP SIZE: 3 students.

ASSIGNMENT TO GROUPS: Choose seven colors of pipe cleaners - three of six different colors, four of a seventh color. Students choose one pipe cleaner without looking and then find other students with the same color of pipe cleaner to form the group.

MATERIALS NEEDED:

- One set per group - approximately 30 Gummy Bears randomly portioned into small ziploc baggies.
- Worksheets: A, B, C, and D.
- Crayons in Gummy Bear colors.

SETTING THE LESSON

TASK STATEMENT: "How many Gummy Bears are in your group's baggie? Today you will sort your Gummy Bears by color, count each color, find the total number of Gunny Bears, and then graph the number of each color of Gummy Bear."

GROUP GOAL: Each group will practice the social skills tasks in the successful completion of worksheets A, B, C, and D.

CRITERIA FOR SUCCESS: None.

SPECIFICE BEHAVIORS EXPECTED: Students are to work at repeating what has been said by other group members and looking at each other.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Randomly select about 30 Gummy Bears to put in each of 7 baggies.
2. Review assigned roles of *Recorder, Gummy Bear Manager*, and *Checker*.
3. Review with students what the social skills of *repeating what has been said* and *looking at others* "look" and "sound" like.
4. Instruct class as to the room arrangement.
5. After students pick their pipe cleaner and find group members, they will collect the baggie of Gummy Bears and the Worksheets, and move into groups.

PROCEDURE: "You will work cooperatively in your group to:

1. Estimate the number of Gummy Bears in your baggie (record group estimates on chalkboard).
2. Sort bears according to colors on sorting sheet. Make a record of the number of bears on the sorting sheet. (Worksheet A).
3. Using the information from Worksheet A, summarize your information on the Tally Sheet. (Worksheet B).
4. Using the information from Worksheets A and B, make a representational graph by coloring the correct number of bear pictures. (Worksheet C).
5. In the large Gummy Bear pattern write as many number stories about Gummy Bears as your group can come up with. For example: seven red Gummy Bears and five white Gummy Bears make 12 Gummy Bears altogether. (Worksheet D).
6. I will be listening for how well your group repeats what each group member says and for how well you look at each other when you speak to each other."

DISCUSSION QUESTIONS:

1. Ask questions about the estimates listed on the chalkboard: Do you see your age plus eight on the chalkboard? Can you find 10+10? Do you see 12-8? etc.
2. Look at your group's graph. Which color has the most? The least? Do any colors have the same number of Gummy Bears?

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

1. All group members will sign for agreement.
2. Teacher will check each group's worksheets for completion and accuracy.

OBSERVER(S): Teacher should listen and record group comments and behaviors on the observation form.

ANECDOTAL/INDIVIDUAL OBSERVATION FORM

Groups	Lesson: Maintainence Skill	Date: Task Skill
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3. 4.		

PLANS FOR PROCESSING: Before the lesson write the student processing sentences on the chalkboard.

- We discovered that _____________________ was the best way for us to complete our task.
- We felt we could share our ideas best when ___________________ .
- We learned that in group work it is easier to do a good job when ___________________ .
- Next time we do group work we should work on __________ ___________________ .

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Students all want the job of being the Manager of the Gummy Bears.

OBSERVED PROBLEMS: Students ate the Gummy Bears before the activity was completed.

POSSIBLE INTERVENTIONS: Jobs can be rotated between Worksheets A and B, Worksheet C, and Worksheet D.

ACTUAL INTERVENTIONS: Informed students that the group's Gummy Bears were to be shared by all the members after the four tasks were completed.

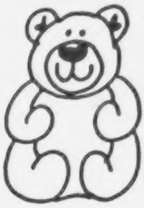
LESSON EVALUATION

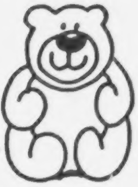
ACADEMIC TASK ACHIEVEMENT: All groups completed the activity with only a few Gummy Bears eaten before completion of all four tasks.

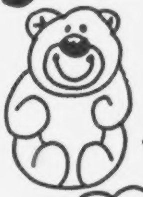
SUGGESTION FOR NEXT TIME: Repeat activity using different counters and rotating assigned roles.

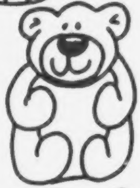
Name: ______________________ **A**

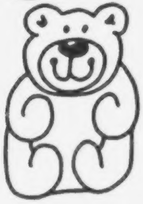
Gummy Bears Tally

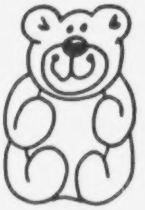
We had ______ yellow s.

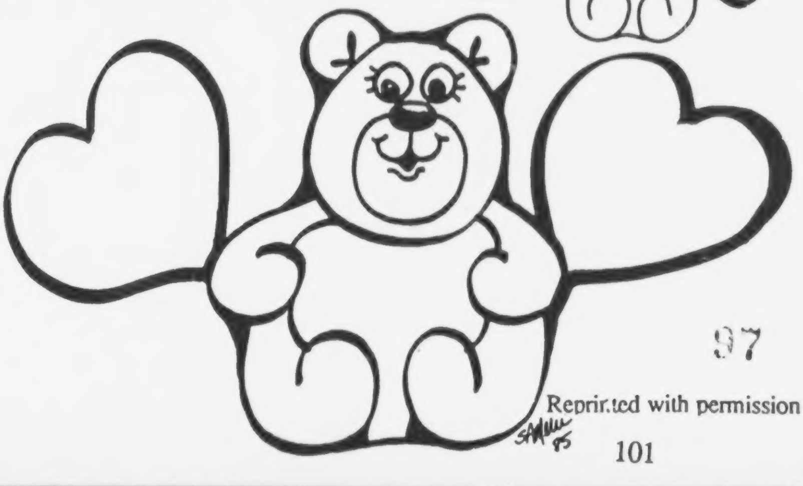
We had ______ orange s.

We had ______ red s.

We had ______ white s.

We had ______ green s.

We had ______ s in all.



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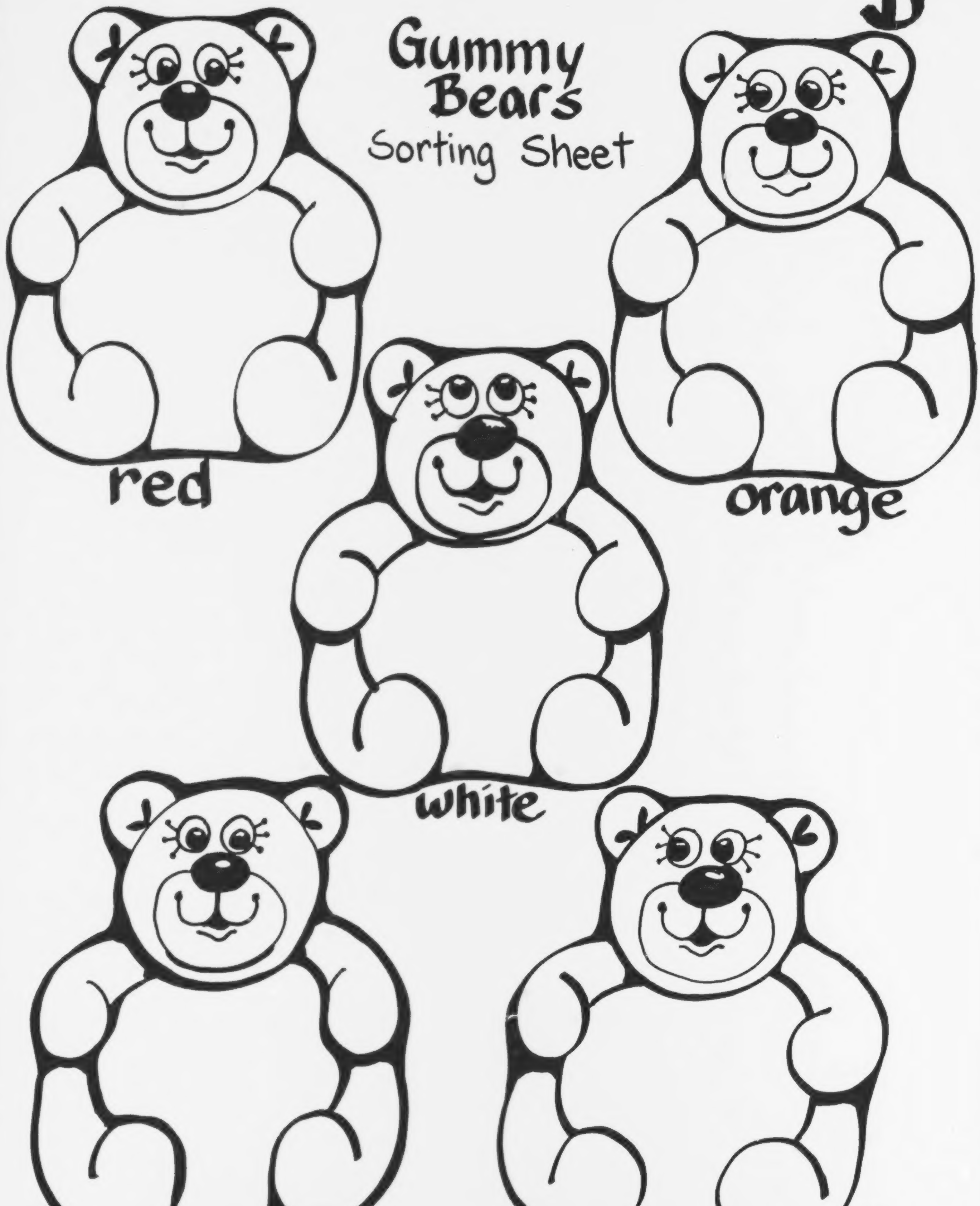
B

Gummy Bears

Sorting Sheet


red
orange
white
yellow
green

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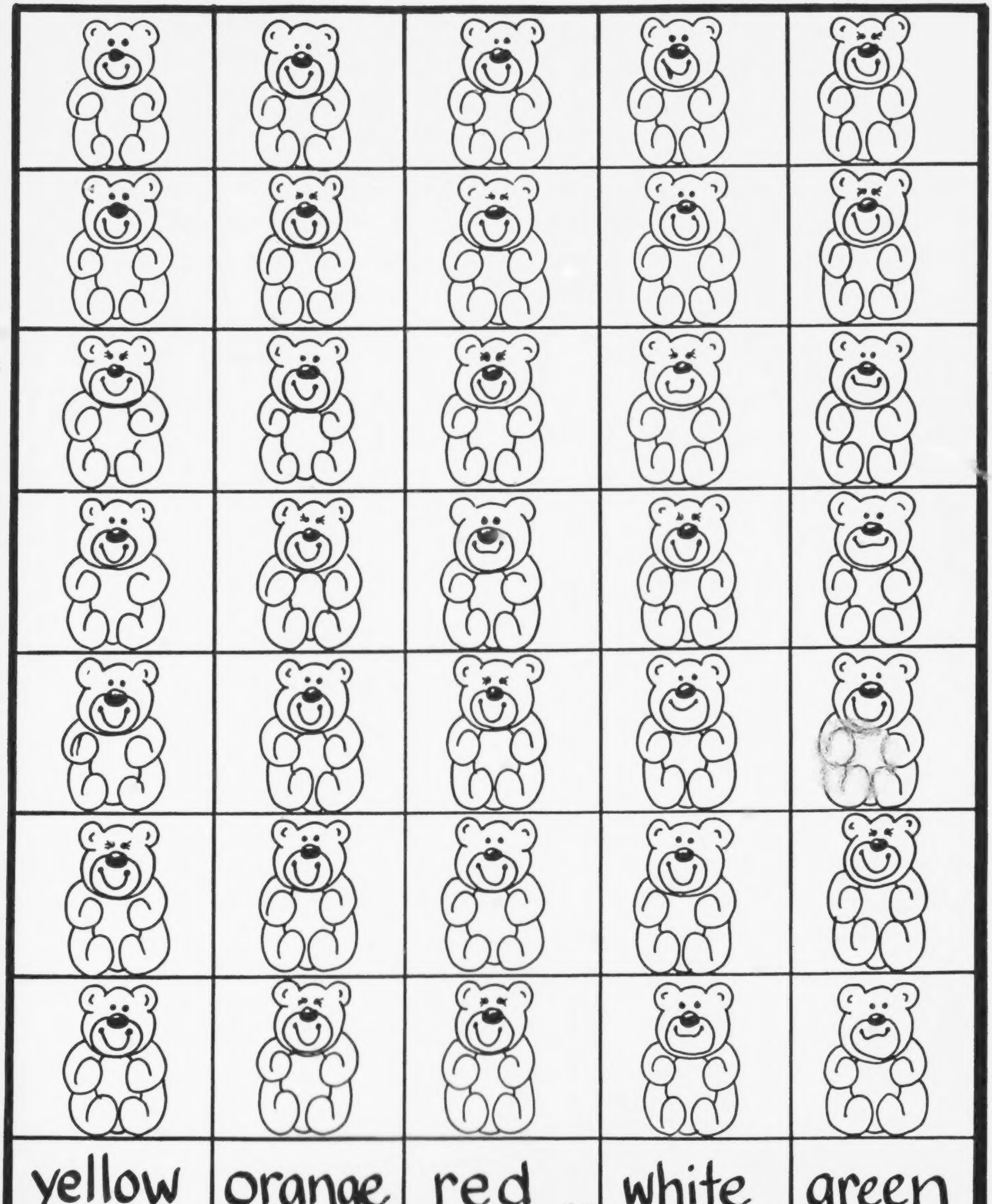
Name: C


yellow
orange
red
white
green

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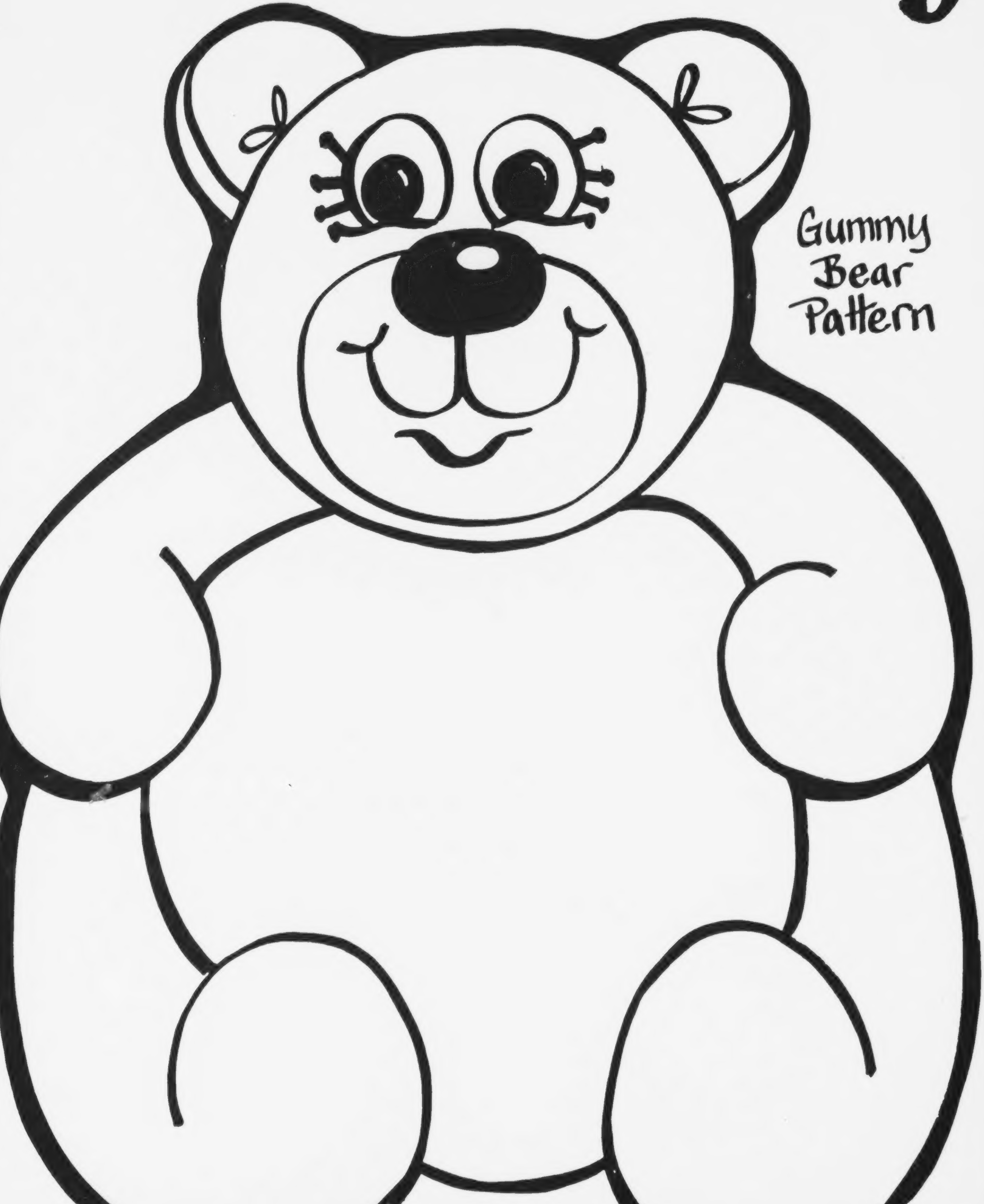
D



Gummy Bear Pattern

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BEANSTICKS

Karen Martini
Our Lady of Miracles School
Project AIMS
Gustine, CA

GRADE LEVEL: Second SUBJECT: Math

GROUP SIZE: 3 students per group.

ASSIGNMENT TO GROUPS: random (variety of ways to do this, one way is to draw a dot on a card, three cards per color, each child picks a card which has been placed on the table face down, the three children who have the same color of card find each other and form a group); or assigned (decide if students should be grouped heterogeneously by mathematical ability - a high, average and a low student in each group, boy-girl, racial integration, or a combination of any of the above.)

ROOM ARRANGEMENT: One desk with two chairs, group at a small table, group on floor with a lap chalkboard on which to write, spaces between all groups to keep the noise level down and to provide the teacher with access to each group.

MATERIALS NEEDED:

- Overhead projector (or flannel or magnetic board).
- Beansticks (popsicle sticks with ten beans glued to each stick).*
- Beans.
- Place value board.
- Worksheet (appropriate page from a math book).
- Role cards (cards with the specific job for each group member).
- Teacher observation sheet.
- Minute timer (optional).

*You could vary the lesson by using manipulatives other than beansticks. This lesson could be adapted to utilize any place value manipulative: unifix cubes, Number Blox, cuisenaire rods, etc.

SETTING THE LESSON

TASK STATEMENT: The students will practice carrying in addition beansticks and beans.

GROUP GOAL: To complete as many problems correctly in the time given using the beansticks--no shortcuts (optional: set the timer).

CRITERIA FOR SUCCESS: The teacher needs to set the criteria for each lesson depending on the expertise of the class and the time available. (Twelve correctly completed problems could be high in some cases, low in others). Stress the need for manipulatives to be used with each problem.

SPECIFIC BEHAVIORS EXPECTED: Students will stay in their seats and address each group member by name in completing the task.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Assign the student to groups either heterogeneously or randomly.
2. Assign each group member a job (this could be done randomly--the person with the shortest hair in your group will be the Recorder, the longest will be the Tens Person, the inbetween hair length person will be the Ones Person--or if members have been assigned to groups you could also assign roles to group members). Give each Recorder a card with the job written on the card. Recorder: Organizes the group's work, reads the problems, records the answers decided on by the group. Tens Person: Takes care of the beansticks. Ones Person: Takes care of the beans.
3. After each student has been assigned a job, review the social skills task for the lesson. Review what the social skills *stay in seat* and *use names* would "look" and "sound" like. Write student ideas on the board so that they will have a reference during the lesson.

PROCEDURE:

1. Pass out one materials packet per group.
2. Explain concept to the large group and model the procedure using an overhead projector.
3. Repeat this modeling procedure having the students join you using their beansticks and beans.
4. When the groups seem comfortable in the task, pass out the group worksheet and set time limit if desired.

The Sample Worksheet and Place Value Board are on the next page.

Sample Worksheet

$$\begin{array}{rrr} 72 & 13 & 32 \\ +\ 9 & +67 & +58 \\ \hline \end{array}$$

$$\begin{array}{rrr} 39 & 48 & 59 \\ +34 & +14 & +25 \\ \hline \end{array}$$

Place Value Board*

Beansticks 10's	Beans 1's

*Enlarge to accomodate the length of the stick, back, and laminate.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: The Recorder reads the problem while the Tens Person and the Ones Person put the appropriate numbers of beansticks and beans, respectively, on the place value board in the appropriate places. Ones Person regroups, if necessary, puts remaining ones in the bottom space, Tens Person adds a new beanstick, if necessary, and brings all the beansticks to the bottom space. After the group adds the totals, Recorder records the answer.

OBSERVER: Teacher.

OBSERVATION FORMAT: As the lesson takes place the teacher records all comments and behaviors that will help her/him to remember appropriate or inappropriate behaviors. The Anecdotal/Individual Observation Form is on the next page.

ANECDOTAL/INDIVIDUAL OBSERVATION FORM

	LESSON:	DATE:
GROUPS	SOCIAL SKILL	SOCIAL SKILL
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		

PLANS FOR PROCESSING FEEDBACK: Meet with as many groups as time allows to discuss the types of social skills you observed. If it is not possible to meet with all groups, then make plans to meet at least once with each group within a few day's time span.

For group processing, write these two sentences on the chalkboard at the beginning of the lesson. Tell the students to be prepared to talk about them at the end of the lesson.

- We practiced________________________ (list social skill) when

  ________________________.

- We used________________________(list social skill) the least because

  ________________________.

Each group must respond to at least one sentence.

To process the Academic Task, write these terms on the board at the beginning of the lesson.

- Addition
- Regrouping
- Computation
- Pattern

After the lesson, ask for examples from the students of what each term had to do with today's lesson.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Unfamiliarity with group work, low level of expertise with addition facts and regrouping concepts.

GROUP FUNCTIONING: Evaluate the ability of each group to accomplish the criteria for success and to practice the assigned social skills.

NOTES ON INDIVIDUALS: Evaluate the level of students who are having difficulty operating in a group and/or accomplishing the academic task. Use the information on the Observation Form to guide you in this.

SUGGESTIONS FOR NEXT TIME: Decide whether students should be assigned to groups or if random grouping will be use. Decide on the social skills for the next lesson (this could be a part of the student processing--have the students decide what they need to do in order for their group to function better). Decide if the students need more whole group instruction and/or informal games to practice the Academic Task before doing more group work. Decide how to get the students to practice the Social Skills more consistently (non-acadmic cooperative games and/or modeling).

MAGNETS

Soni Hale
George Air Force Base Elementary
Adelanto Elementray School District
Adelanto, CA

GRADE LEVEL: Second - Third Grade SUBJECT: Science

GROUP SIZE: Four students

ASSIGNMENT TO GROUPS: Heterogeneous groups are established by the teacher considering the child's academic and social skill level. This procedure is particularly appropriate at this grade level to ensure proper grouping and success. Students at the primary grade levels often have less developed social skills, and, although they can verbalize what the skills look like and sound like, they often cannot seem to exhibit those skills in a group.

ROOM ARRANGEMENT: Groups are seated at tables and desks of four arranged so that they are facing each other to facilitate quiet voices, leaning in, and sharing of materials. Groups are separated from each other. Groups remain together at their seats during Processing time.

MATERIALS NEEDED:

- One magnet worksheet for each group.
- Three magnets per group (horsheshoe, bar, round, or u-shaped).
- Bag of objects to be tested (items listed on worksheet).
- One pencil per group.

SETTING THE LESSON

TASK STATEMENT: "Your group is to test various objects to find out if they are magnetic or non-magnetic."

GROUP GOAL: The group must successfully complete one worksheet.

CRITERIA FOR SUCCESS: The one worksheet must be completed and signed by each group member to indicate agreement and understanding. Each group member will receive a magnet as a reward if the worksheet is completed with signatures and the group has received at least three (3) points in the two social skills areas (see Observation Form).

SPECIFIC BEHAVIORS EXPECTED: Students contribute ideas of what the behaviors of *Sharing and Listening* ""look like" and "sound like." I write those ideas on a chart which remains displayed for students to refer to during the lesson.

THE LESSON

MANAGEMENT SUGGESTIONS:

- Jigsaw roles - group members determine alphabetical order of first names. The first person becomes the *recorder*, second is the *runner*, third is the *timekeeper*, and fourth is the *checker*.
- Prepare bag of objects to be tested by each group. The materials in the bag are to be divided equally among group members so that each person may test three items. The three magnets must be shared by passing so that all items are tested by all the magnets.

PROCEDURE:

- "First, you will predict which objects will be magnetic or non-magnetic and record your group's prediction.
- "Second, you will actually test each object and record the results.
- "Third, your group will write a conclusion about which materials you found to be magnetic and non-magnetic.
- "Finally, each member of your group will sign the paper to show me that you all understand and agree."

Group worksheet is on the last page.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- *Sharing* - looks like passing politely, each member has some materials, taking turns; sounds like "Do you need...?" "Would you please pass...?" "May I have the ...?"
- *Listening* - looks like leaning in, nodding, smiling, etc.; sounds like quiet voices, only one person speaking at a time, checking for understanding.

OBSERVER: Teacher only.

OBSERVATION FORMAT: Chart written on chalkboard for all students to see when they receive a point for appropriate behavior. This method of monitoring has been most successful for me. The students can see when they have been observed demonstrating the social skills and are encouraged to continue or to try harder in order to earn the points.

OBSERVATION CHART		
	"LISTENING"	"SHARING"
GROUP NAMES		

PLANS FOR PROCESSING: Teacher reviews chart on the board and describes some positive behaviors observed in the groups and by individuals. The entire class responds to Processing questions with Hands on Head to indicate agreement. Teacher asks questions such as "Did you listen to others?" "Did others listen to you?" "Did you share or take turns?" "Did others in your group share with you?" Individuals respond to the question of "What could you do next time to listen better or be a better sharer?"

Academic processing - Random selection of individual members to report on results of experiments. Check with all groups to see if they agree with the results. Review each group conclusion.

Give rewards to the groups who completed the worksheet and received at least three (3) points in the areas of Sharing and Listening.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Magnets not working; disagreement on predictions; possessiveness of magnets and/or objects.

OBSERVED PROBLEMS: Distribution of objects to group members.

POSSIBLE INTERVENTIONS: Help students to divide objects by suggesting possible methods.

ACTUAL INTERVENTIONS: Runners get bags of objects only after teacher has checked to see that predictions have been completed. Monitor to see that objects have been distributed and that magnets are being shared.

LESSON EVALUATION

TASK ACHIEVEMENT: All groups successfully completed the task and agreed with and understood the results.

GROUP FUNCTIONING: Groups functioned well and enjoyed the task. Some groups of three students (with members absent) chose to give each person one magnet, then all members could test all objects. Some groups let the tester record the results rather than have one recorder.

NOTES ON INDIVIDUALS: All individuals appeared to be actively involved. Checkers watched as I tallied points on the board to report to the group how well they were doing.

GROUP WORKSHEET

Group Name: ____________________

M=magnetic NM=not magnetic

	Name of Object	Our Prediction	Our Results
1	balloon		
2	brass brad		
3	cork		
4	nail -small		
5	paper clip		
6	button		
7	spoon		
8	nail - large		
9	wood block		
10	round wood		
11	large round can top		
12	round metal washer		

*Our conclusion is: ____________________

Signatures: ____________________

ARE YOU A SQUARE?

Terry zumMallen
Educational Specialist
SERN Region 6
Malaga, CA

Frank zumMallen
Tarpey Elementary School
Clovis Unified School District
Clovis, California

GRADE LEVEL: Second - Fourth grades.   SUBJECT: Math/Science

GROUP SIZE: Four students.

ASSIGNMENT TO GROUPS: Assign by math skill level to insure heterogeneous groups.

ROOM ARRANGEMENT: Place groups around the perimeter of the classroom to allow metric tapes to be placed on walls.

MATERIALS:

- Metric tapes, four per group.
- Individual Record Sheet, four per group.
- Group Prediction and Measurement Sheet, one per group.
- Class Wall Chart, one per class -- made up by teacher.
- Colored Pencils or Crayons, one set per group.
- Processing Sheet, one per group -- our paper.

SETTING THE LESSON

TASK STATEMENT: The groups of four will consensually predict whether each student is a square, wide rectangle, or tall rectangle and record on Group Prediction/Measurement sheets. Each student transfers group prediction to Individual Record Sheets.

GROUP GOAL: Everyone will participate in the predictions, measurements and decisions about the actual shape of each individual team member. Team members will indicate agreement by signing off on the Group Prediction/ Measurement Sheet. You will have 45 - 60 minutes to work.

*Adapted From: Project AIMS, Fresno Pacific College.

CRITERIA FOR SUCCESS: Group evaluation will be on the basis of successful completion of the Individual Record Sheet and Group Prediction Measurment Sheets. Individual students will know his/her own body shape, body shapes of other team members and will be able to demonstrate the relationship between arm length and height.

SPECIFIC BEHAVIORS EXPECTED: "Everyone is to participate in the predictions, measurements, and decisions about the actual shape of each individual team member. You will indicate your agreement by signing off on the Group Predicition and Measurement Sheet."

THE LESSON

MANAGEMENT SUGGESTIONS:

- Determine in advance group assignment.
- Make job assignments.
- Cooperative behavior - Discuss what is participation? Agreement? What do they "look" and "sound" like?
- Distribute materials to each group.
- Allow groups 45-60 minutes to work.

PROCEDURE:

1. Each group is to predict by consensus whether each member is a square, wide rectangle, or tall rectangle. Each student transfers the group prediction to his/her Individual Record Sheet.
2. Each group then measures its members' heights and arm spans. The actual measurements are recorded on the L-Shaped Bar section of the Individual Record Sheets.
3. Each individual shares his/her measurements and the groups agrees on actual shape. Actual shape for each student is recorded on the Group's Prediction and Measurement Sheet. Body shape is also to be recorded on each individual's record sheet.
4. Each individual colors in the appropriate square on the graph section of the Group Prediction and Measurement Sheet and signs his/her agreement to the group conclusions.
5. Each group shares their conclusions with the class and records data on the class graph.
6. Each group will write two statements about the class graph on the Group Prediction and Measurement Sheet.

Examples:

- The least common body shape is ________________ .
- The most common body shape is ________________ .
- Most of the girls are a ____________ .
- More boys are a ______________ than girls.

MONITORING AND PROCESSING

OBSERVATION FORMAT: The teacher will monitor each group to facilitate equal participation and consensus. Teacher may choose to take notes on observations.

OBSERVER(S): Teacher.

PLANS FOR PROCESSING: Teacher gives feedback to all groups regarding observations made during the lesson. Groups will complete and turn in the following statements:

One thing we did well together was...
One thing our group had trouble agreeing on was...
To help our group work better together, we need to...

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Students may not be able to reach agreement.

POSSIBLE INTERVENTIONS: Teacher may facilitate consensus with such processing questions as, "How is the group going to handle this?", or content questions, "How close do the measurements have to be to make a square?" or "Can you round off measurements?"

LESSON EVALUATION

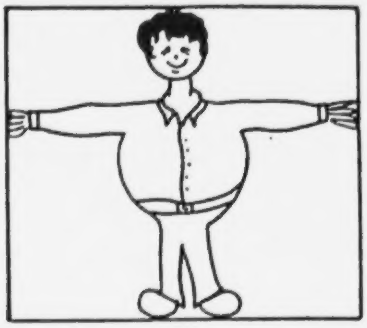
ACADEMIC TASK ACHIEVEMENT: We found that the students tended to "pair up" when there were four tapes in each group.

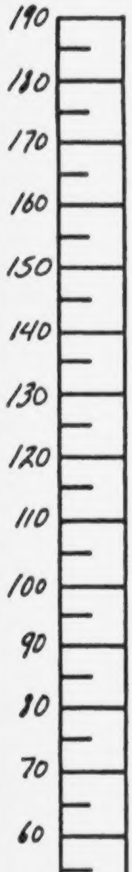
SUGGESTIONS FOR NEXT TIME: This lesson should be introduced and implemented in separate stages (steps 1-6). This will provide a more efficient management structure. Combine steps four and five by allowing the students to record their results on the class graph as soon as their group is ready. This will save time!

EXTENSION ACTIVITIES: Measure other classes, family members, teachers, local community members athletes (class can write to obtain info).

NAME ______________________

ARE YOU A SQUARE?

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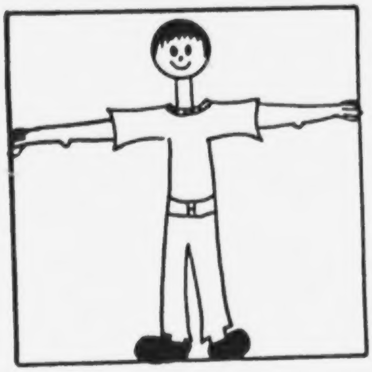
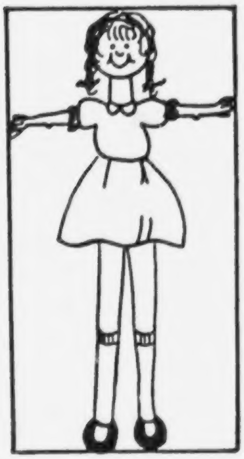


HEIGHT

______ CM

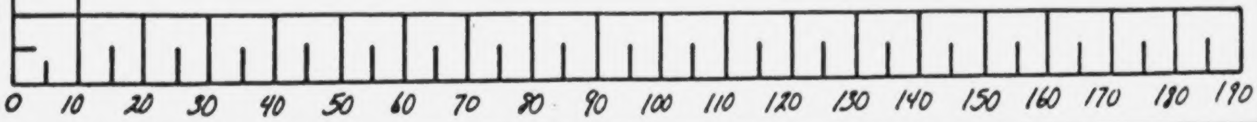


HOW DOES YOUR HEIGHT COMPARE WITH YOUR ARM LENGTH?

PREDICT ______________

ACTUAL ______________
(SQUARE, TALL RECTANGLE, WIDE RECTANGLE)

ARM LENGTH _____ CM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Group Prediction/ Measurement Sheet

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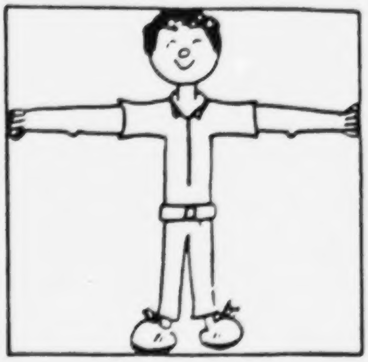
ARE YOU A SQUARE?



Group Prediction

circle S for square, TR for tall rectangle or WR for wide rectangle.

name	prediction				actual		
	S	TR	WR		S	TR	WR
	S	TR	WR		S	TR	WR
	S	TR	WR		S	TR	WR
	S	TR	WR		S	TR	WR

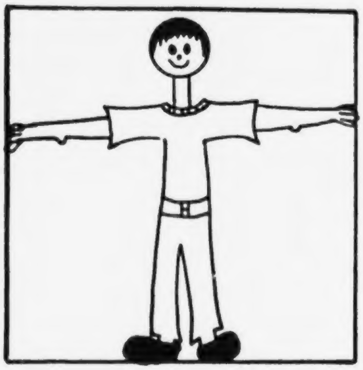
Team graph		
S	TR	WR

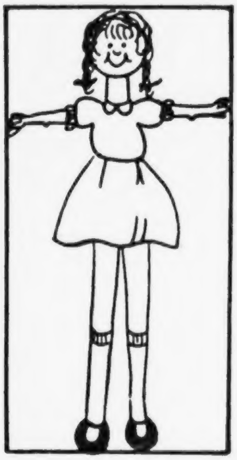
What does the class graph show?

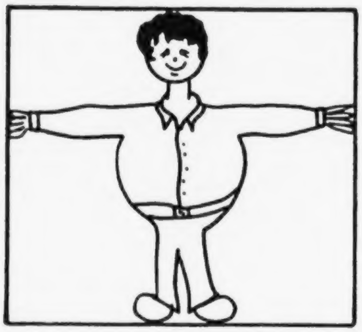
1. ______________________________

2. ______________________________

Team Signatures:







CHECK ONE

NAME	HEIGHT	ARM	SQUARE	TALL RECTANGLE	WIDE RECTANGLE

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PLACES ON THE TONGUE

Diane Rothschild
Lammersville School
Lammersville Elementary School Dirtrict
Tracy, CA

GRADE LEVEL: grades 2 - 5. SUBJECT: Science

GROUP SIZE: 3 - 4 students.

ASSIGNMENT TO GROUPS: Heterogeneous grouping by ability based upon the teacher's decision.

ROOM ARRANGEMENT: Desks are arranged in groups of three to four.

MATERIALS: Worksheet on the tongue, tasting kits, Group Dynamics worksheets.

SETTING THE LESSON

TASK STATEMENT: Students will identify the location of four different taste sensors on the tongue by tasting four different substances.

GROUP GOAL: Students will label a diagram of the tongue, identifying the four locations of the four different kinds of sensors.

CRITERIA FOR SUCCESS: Completed diagram will be signed by all participants.

SPECIFIC BEHAVIORS EXPECTED: All group members will fully participate and use encouraging and supportive language.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Assign roles of tasters, recorder, and encourager to students prior to activity. You may wish to rotate the roles as everyone will want to be the taster.
2. Discuss taste buds and the different tastes of salty, sweet, sour, and bitter. Have students give examples of foods for each taste sensation.
3. Assign students to groups. Review task and each member's job.

PROCEDURE:

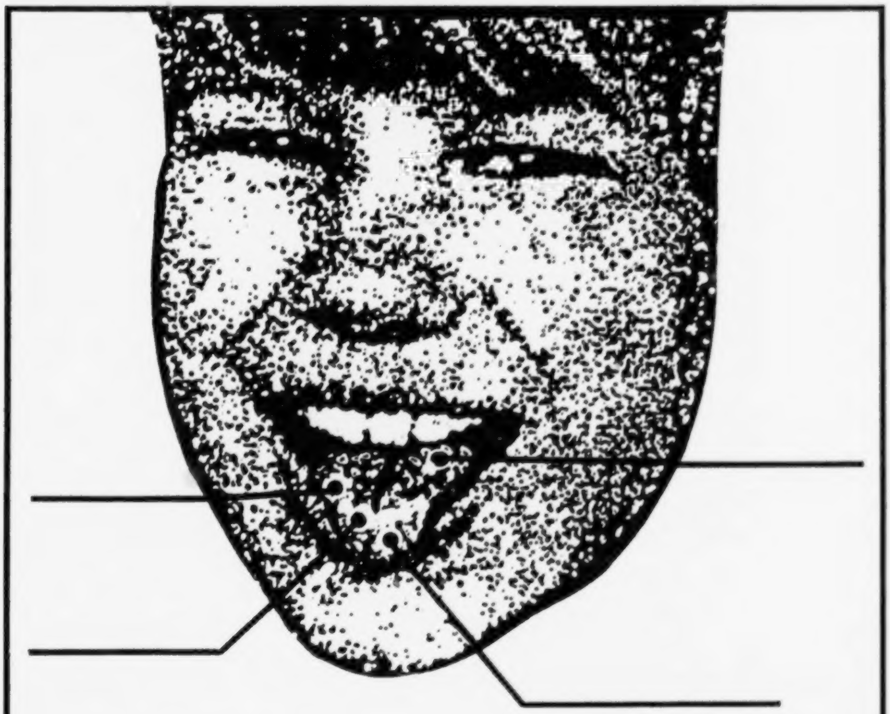
1. Pass out one tasting kit to each group.
2. Each group is to taste the various food samples and determine where each taste sensation is located on the tongue.

GROUP MEMBERS: ____

HOW DO WE TASTE FLAVORS?

Your taste buds are just below the surface of your tongue and in three places in your throat. There are four tastes that you can detect through your taste buds -- SALTY, SWEET, SOUR AND BITTER.

See if your group can detect these four places on the tongue by tasting the food samples given to your group. Then label those places on the picture of the tongue below.



Where on your tongue are the four taste sensors?

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- Complete worksheet as a group
- Complete observation form
- Each member contributes to the activity.
- Each member provides encouragement.

OBSERVATION FORMAT:

Name:	Contributes	Encourages

Our group did better today by:

One thing we could do better next time:

OBSERVER(S): Teachers, student aide (We used an eighth grade special day class student in this activity.)

PLANS FOR PROCESSING: Hold group discussion upon completion as well as the self-evaluation portion of the Group Dynamics Worksheet.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: There may be lack of full participation, confusion over tastes, inaccurate answers.

OBSERVED PROBLEMS: There were dirty hands, students didn't know how to go about tasting in a scientific way which resulted in inaccuracies.

POSSIBLE INTERVENTIONS: Assign jobs appropriate to ability; label packets (sweet, sour, etc.), and discuss flavors before activity and give correct answers during feedback portion of activity.

ACTUAL INTERVENTIONS: All of the above; gave suggestions to groups during observations regarding scientific method of tasting.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: All groups tasted and labeled (some inaccuracies which were corrected during feedback session).

GROUP FUNCTIONING: Full participation and cooperation; all diagrams were completed. Use of encouraging language was minimal.

NOTES ON INDIVIDUALS: Special education students were comfortable using encouraging language as they had more experience doing so. A couple of students remembered previous lesson and tried to correlate what they remembered with the actual tasting experience. Otherwise there was no notable differences between functioning of special education and regular education students.

SUGGESTIONS FOR NEXT TIME: Make sure all hands are washed before beginning. Demonstrate the scientific method of tasting.

TEDDY BEAR MATH

Larry Eckland
Project AIMS,
Fresno Pacific College
Fresno, CA

GRADE LEVEL: 3rd - 4th SUBJECT: Math

GROUP SIZE: 3 students.

ASSIGNMENT TO GROUPS: Prepare for random grouping sorting playing cards into groups of threes (three jacks, three queens, three kings, three 10s, etc.). Prepare as many groups of threes as there will be cooperative groups. Provide for the "remainder" by adding one more card to as many groups as necessary. For 22 students, six groups will have three members, and one group will have four members.

ROOM ARRANGEMENT: One desk with two chairs, or all group members in circle on floor, or group at small table, spaces between all groups.

MATERIALS NEEDED: One set per group.

- One orange.
- One primer balance.
- Approximately 50 Teddy Bear counters.
- Worksheet A.
- Pencil.
- Small piece of tape.

SETTING THE LESSON

TASK STATEMENT: "How many Teddy Bear counters do you think your orange weighs? Each group will estimate their orange's weight and then use Teddy Bear counters to measure its weight."

GROUP GOAL: Each group will practice the social skills tasks to complete Worksheet A.

CRITERIA FOR SUCCESS: None.

SPECIFIC BEHAVIORS EXPECTED: The social skills we will be working on are keeping things calm and working in an orderly way.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Collect all the items listed in Materials section.
2. Write the social skills of *working in an orderly way* and *keep things calm* on the chalkboard. Review with the students what the skills "look" and "sound" like.
3. Write the job explanations for the assigned roles of Teddy Bear Manager, Scale Manager, and Recorder on the chalkboard.
4. As students choose a card, they will find other group members that have a card with the same number, collect their materials, and move into groups.

PROCEDURE: "Your group will work cooperatively to: (Explain Worksheet A)

1. Estimate how many Teddy Bear counters your orange weighs.
2. Weigh your orange and count how many of each color of Teddy Bear counters it took to balance the scale.
3. Compare your group's estimate with the actual weight of the group.
4. Write your names on a piece of tape and label your orange with it so that you will get the same orange back tomorrow.
5. I will be listening for how well your group works in an orderly way and how well your group is able to keep things calm."

DISCUSSION QUESTIONS:

1. How many Teddy Bear counters did your group's orange weigh?
2. Was your orange heavier or lighter than you expected it to be?

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- Members will sign for agreement.
- Teacher checks each group's work for accuracy.

OBSERVER(S): Teacher should listen and record group comments and behaviors on the observation form.

ANECDOTAL/INDIVIDUAL OBSERVATION FORM

Lesson:

Date:

Groups	Maintainence Skill	Task Skill
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3.		
1. 2. 3. 4.		

PLANS FOR PROCESSING: Before the lesson write the student processing sentences on the board:

- We discovered that ____________________ was the best way for us to solve the problem of how much the edible part of the orange weighed.
- The Social Skill that we practiced most often was______________ .
- We found that in order to do a good job it is necessary to _______ .

After the activity each group will report to the class on at least one sentence.

POSSIBLE PROBLEMS: Groups uneven in terms of student skill levels.

POSSIBLE INTERVENTIONS: Predetermine groups to include a student with high mathematics skills, one with average skills and one with lower skills.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Groups worked well together within the allotted 30 minutes time period.

SUGGESTIONS FOR NEXT TIME: As a follow-up to this activity, the following lesson can be implemented the next day.

MANAGEMENT SUGGESTIONS:

1. Use materials already collected for previous lesson and worksheets B and C.
2. Use the same groups and the same assigned roles for each group member as in previous activity.
3. Write roles and responsibilities for each role on the chalkboard. Review with students.
4. Write social skills of *giving ideas* and *inviting others to talk* for the lesson on the chalkboard and review with the students what they "look" and "sound" like.
5. Write student processing sentences on the chalkboard to be discussed later. Each group will choose at least one sentence to discuss.

PROCEDURE:

1. Determine how much of your orange is edible. (Worksheet B).
2. Then you will write a story about how your group solved the problem, beginning with the previous activity "Teddy Bear Math." (Worksheet C).
3. I will be listening for how well you give ideas and encourage others to talk."

DISCUSSION QUESTIONS:

1. How many Teddy Bears counters did your orange peeling weigh (Check for accuracy by asking how many colors of each counter there were)?
2. Was your orange peeling heavier or lighter than you expected it to be?
3. How did you figure out how many Teddy Bear counters the edible part of your orange weighed?

TEDDY BEAR MATH

Page 1

A

Name: ____________________

Teddy Bears come in four colors....red, green, yellow, and blue. We will use Teddy Bears to count, to weigh, to compare, to add, and to subtract.

1. Guess how many Teddy Bears your orange weighs:

Our orange will weigh ________ Teddy Bears.

2. Put your orange in the scale box. Now put in enough Teddy Bears to balance your orange......remember to make scale boxes even.

How many Teddy Bears are there?

Reds ________

Greens ________

Yellows ________

Blues ________

All together ________

Our orange weighs ______ Teddy Bears. There are ______ red Teddy Bears, ______ green Teddy Bears, ______ yellow Teddy Bears, and ______ blue Teddy Bears.

We guessed that our orange would weigh ______ Teddy Bears.
Our orange weighed ________ Teddy Bears.
The difference between our guess and the weight of my orange was ________ Teddy Bears.

Our guess was too high ________
Our guess was too low ________

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B

MORE TEDDY BEAR MATH

Page 2

Name: ____________________

3. Please peel your orange. Guess how many Teddy Bears your peeling will weigh.

Our orange peeling will weigh ______ Teddy Bears.

4. Please weigh the peeling with the Teddy Bears.

How many Teddy Bears are there?

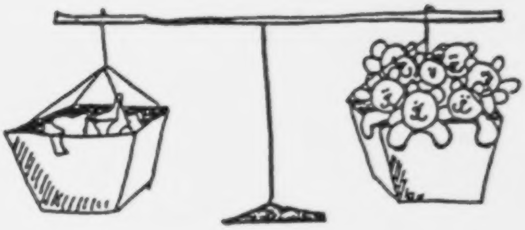
Reds ______

Greens ______

Yellows ______

Blues ______

All together ______

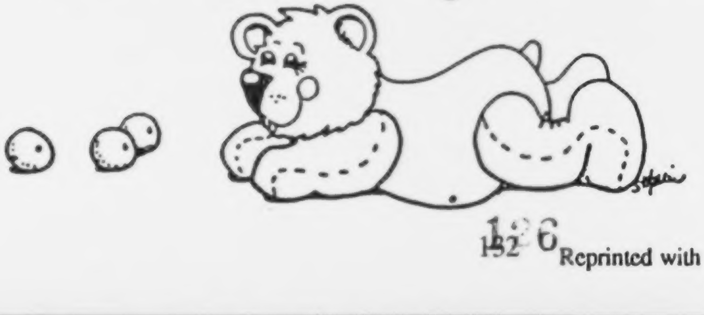


5. Now, can you answer the big question? If you eat the orange without the peeling, how much will the orange weigh in Teddy Bears? __________

The whole orange weighed ______ Teddy Bears.

The peeling weighed ______ Teddy Bears.

The eating part weighed ______ Teddy Bears.



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MORE TEDDY BEAR MATH

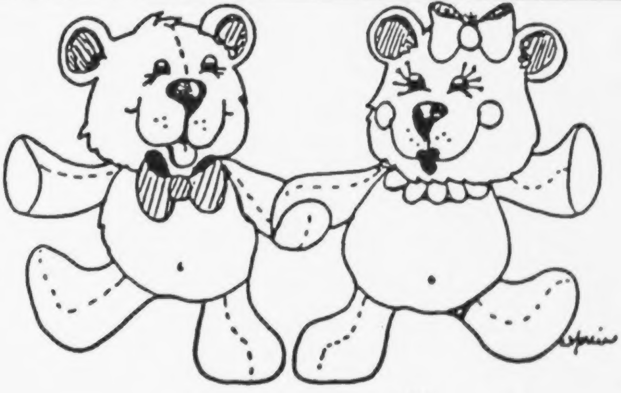
Page 3

C

Name: ____________________

Now you tell the story:

Weguessed that the whole orange would weigh ________



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VOLCANOES

Rebecca Preble
Olive View Elementary
Corning Union Elementary School District
Corning, CA

GRADE LEVEL: 5th SUBJECT: Science

GROUP SIZE: 5 - 2 classes of 32 students per class.

ASSIGNMENT TO GROUPS: Number students as they enter classroom-written numbers on cards are in specific areas.

ROOM ARRANGEMENT: Desks are moved aside. Students are seated on carpeted floor.

MATERIALS NEEDED:

1 large sheet of butcher paper
1 wide felt-tip pen
1 sheet of butcher paper for each group
crayons and pencils for each group

SETTING THE LESSON

TASK STATEMENT: "Tell me all you know about volcanoes". As students respond, write these responses on the large butcher paper. (Some responses may not be factual. Put them down for future corrections by students.)

GROUP GOAL: Each student will learn by completing written assignments and hands-on projects, and scoring 75% or above on tests about the basic understandings of volcanoes while working in Cooperative Learning groups. Each student will show ability to complete assignments cooperatively by using acceptable social interaction vocabulary and responses while responsibly fulfilling his/her job within the Cooperative Learning model. Students will draw and write about what volcanoes are without teacher input.

CRITERIA FOR SUCCESS: Each group will present their information and pictures of volcanoes to whole class for evaluation.

SPECIFIC BEHAVIORS EXPECTED: We brainstormed about positive and effective ways to help members of the group complete the assigned task.

THE LESSON

MANAGEMENT SUGGESTIONS: Most students have heard about volcanoes, some have seen pictures showing the eruption of a volcano, but most have no idea how this eruption occurs or why. In order for the lessons to be interesting for all, I've found that lots of hands-on projects are extremely necessary as well as the lectures and films. Early into the unit a field trip was taken to Mt. Lassen to actually see the volcanoes there and get a feeling for the size and shapes of volcanoes.

PROCEDURE:

Place students into Cooperative Learning groups by giving a sheet of paper to six students, numbered from one to six. These students hold the numbers up in areas around the room, while the teacher counts each of the other students. Ones go the the student with the number 1, twos go to the area where the student has the paper numbered 2, etc. Teacher explains that students are to work in groups to complete all assignments. These groups are to have specific jobs for each student within the group. The jobs are as follows:

> *Facilitator*: Like a teacher, keeps students on-task and makes sure all have a chance to participate.
>
> *Reader*: Reads all information handed to groups and reads reports written by the group to the whole class.
>
> *Recorder*: Writes all information down by recording the group's answers for completion of assigned tasks.
>
> *Re-writer*: Re-writes the written assignments once the group members agree that the task is completed.
>
> *Quieter*: One or more students may work on this job. The quieter helps the group members work quietly by using acceptable social interaction skills. (Acceptable ways to keep the group quiet is modeled by teacher and students in a short brainstorm lesson!)

Teacher gives groups two minutes to choose jobs. While jobs are being chosen, teacher writes "What is a Volcano?" on the chalkboard. Students are to brainstorm for five minutes about the question. Teacher writes key words on chalkboard (to be used for vocabulary words and memory of subject). Product: Each group is to write all they know about volcanoes on a large piece of poster paper and illustrate a volcano.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: I and the two-5th grade teachers "floated" around the room modeling positive interaction remarks and giving verbal recognition to those using the brainstormed behavior.

OBSERVATION FORMAT: None at present.

OBSERVER(S): Becky Preble - teacher giving lesson, Carrie Holiman, and Virginia Bagacalupi - 5th grade teachers.

PLANS FOR PROCESSING: Immediate verbal approval. Five minutes before class ended, the three teachers gave whole - class recognition to specific groups for accomplishing recommended verbal behavior while completing assignment.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Due to the large numbers of students in one classroom, private space was limited and could cause distraction from own group's task.

OBSERVED PROBLEMS: Students felt strange giving others compliments using the brainstormed comments.

POSSIBLE INTERVENTIONS: Time has shown that this new form of verbal interaction can be used by the students. Reward checks helped those who were shy and/or thinking this was silly.

ACTUAL INTERVENTIONS: The three teachers used the language brainstormed while "floating" around the room. They asked specific students to repeat a positive interaction comment when one was heard. These students were verbally rewarded.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Due to the large numbers of students in one classroom, private space was limited and could cause distraction from own group's task.

GROUP FUNCTIONING: All groups were assigned to give two recommended positive interaction remarks while using the Cooperative Learning job models to complete the assigned task.

NOTES ON INDIVIDUALS: One boy felt uncomfortable in his group due to his being the only boy with girls. He is a shy person and was genuinely embarrassed, so we placed another boy in his group. This solved the problem.

SUGGESTIONS FOR NEXT TIME:

OBJECTIVES: Day 1

Each group is to complete the assignment from Day 1 and prepare for sharing the finished product with the whole class.

Teacher gives specific time limit for completion of products. At time designated, groups share product by presenting poster to class and reader reads the information to class. Whole class may have five minutes to respond to the presented material by asking questions of the group presenting or giving a comment. Products are stored for future information and to show growth in valid information about volcanoes.

OBJECTIVES: Day 2

Teachers hand out information printed for each group (1 copy per student) about how volcanoes are formed. Groups are given two minutes to choose new jobs. Direct groups to read the information and re-write information for the group book on volcanoes. Each student completes a drawing showing a volcano in the forming process for the group book. Each group reads the information written about the formation of volcanoes and shows pictures to the whole class. Each group takes three comments/questions from other groups.

OBJECTIVES: Day 3

Teachers team-teach to illustrate how the Strato/Composite Volcano and the Shield Volcano erupt lava. One teachers used a tube of tooth paste, lid on with a hole punched into the side near the top. This illustrates the Strato/Composite Volcano. Push the tooth paste up near the lid. Take the lid off as the paste is pushed up from the bottom. The students see the weakened area (the hole) has more lava flow than the top. Brainstorm with class as to why the lava flowed out of the weakened side of the tube. As one teacher is leading the brainstorming, the other teacher writes key words on the Volcano vocabulary chart. By using two boards that slide apart with a board on the bottom with large holes drilled, the teacher can show eruption of a Shield Volcano. Illustrate the movement of the boards (plates) and show the holes in the bottom board (cracks in the earth's crust). Teacher then sprays shaving cream up through the holes. As the shaving cream begins to appear on the surface of the boards, the other teacher pushes the boards together to show the cream spurting up and out, covering the boards in rounded mounds. Brainstorm about this illustration and compare or contract the eruptions.

Product: Groups are to illustrate the two different volcanoes using modeling clay. Five sentences are to be written on the poster board that each volcano is placed upon.

OBJECTIVES: Day 4

Students are to choose jobs, use five minutes to prepare for sharing the information they've written about the different volcanoes and the eruptions along with the clay models. Groups take five minutes for comments/questions from others.

OBJECTIVES: Day 5

Teachers give lecture, using team-teaching techniques, about the four different types of volcanoes. Printed material is handed out. (The handout are printed information on volcanoes gathered from the school library, newspapers, Newsweek magazine, National Geographic magazine, and Time/Life books on volcanoes and continental plates.) Students are to write five paragraphs about the lecture and information from the handouts on the different types of volcanoes. This assignment is handed in after the re-writer is finished for duplication for each member's book. Each member is to draw the four types of volcanoes for their book.

OBJECTIVES: Day 6

Groups share the five paragraphs after jobs are chosen. Comments should be no more than five minutes for each group. All students gather into class discussion to talk about how the groups are working together. Teachers start discussion, but students are to comment to each other with little teacher involvement.

OBJECTIVES: Day 7

Field trip to Mt. Lassen Park. Classes are split into two groups (three groups go with one teacher and a park ranger, three go with the other and another park ranger). Groups, after the rangers' lecture make the four types of volcanoes out of snow right there in the old Mt. Tehama Volcano base.

OBJECTIVES: Day 8

Teachers lead brainstorming about information on the field trip. Key words are printed on volcano vocabulary poster. Students are to write five paragraphs or more about the information gained on the field trip and in the classroom about the four volcanoes. After re-write is completed with illustrations, information is read to class with comments to follow. Teacher duplicates information for each member's book.

OBJECTIVES: Day 9

Teachers team teach lecture on plate tectonics using hand-outs and chalkboard for illustrating subduction, hot spots, rifts, and movements of plate. Brainstorm questions and hypotheses students have about plates and the volcanic eruptions. Groups are to form a picture on large poster paper to illustrate the information they gained during the lecture. They are to show in picture form how the plates cause volcanoes.

OBJECTIVES: Day 10

Students complete Day 9's product. Groups present product to the class and receive questions/comments.

OBJECTIVES: Day 11

Students watch a 35-minute film on plate tectonics. Each student takes notes on the film using key-word note-taking. Groups brainstorm with group. Each group writes five observations ("Things I learned from the film") and five questions ("Things I'm not sure about"). Whole class participates in discussion, as the different groups share their assignment.

OBJECTIVES: Day 12

Teachers tell class about a Science Fair in Chico, California in the spring. Groups are to decide what question they would like to illustrate and write about for the Science Fair. After the hypothesis is decided upon, each group is to begin answering the question. They are guided by teachers in the beginning as to how to begin proving the hypothesis. The first page should set the stage by giving basic information about the topic.

OBJECTIVES: Day 13

Students are to read the group hypothesis and first page to class. Groups take five minutes of comment/questions from class and teachers. Groups are to begin on second page. In order for the students to write correctly, teachers give short English lesson explaining the importance of topic sentences, supporting sentences, and concluding sentences. With this information, students are to continue with science pages proving the group's hypothesis.

OBJECTIVES: Day 14

Students read all of the information that they have written. Groups take the five minutes of comments/questions from class and teachers. This validates the work going on in each group, gives each member a chance to read the group paper to the class, allows other groups to hear what others are writing, and gives the teachers information about the assignment without taking time during class or taking the papers home. The comments made by students and teachers will help the group finalize the writing.

OBJECTIVES: Day 15

Complete Science fair booklet, writing pages that are necessary to prove the hypothesis. Sharing completed work should be done during the last 15 minutes of class time.

OBJECTIVES: Day 16

Give more time for completion of the page. Re-writing should be done as the pages are completed. Each student illustrates the title by drawing/writing a title page for the group's book.

OBJECTIVES: Day 17

Students are given directions for making test questions. Each group is to write ten test questions and answers. The questions are written on a ditto master to be duplicated for the big test day! Answers are placed in the group book for correcting the answers given by other students.

OBJECTIVES: Day 18

Teachers define how test will be taken. (1) Each student will be responsible for own test answers. (2) All students have just one period (time) to complete the test. (3) Students may help other members within group with answers by asking them questions to bring out possible answers. (4) Groups that score over 75% on each member's test will receive an extra 5% per test paper. (5) Students may not give answers to questions.

Note: Since some of my Learning Handicapped students are at a beginning level in both reading and writing and cannot possibly complete this assignment as it is given, I and the other teacher take these students to a separate area in the classroom and give them another assignment. They are to illustrate the (4) types of volcanoes and name them. They are to try to spell the names as best they can. They are given 50% for the illustration and 50% for the names. Their scores are included with their group's scores for the extra 5%.

OBJECTIVES: Day 19

Each group corrects the tests that they wrote and gives the percent score. They are to write a comment on each paper about the way the test was answered. Teachers compile these scores and give the extra 5% for those groups who gained the extra percent. Discussion about the tests take the last 15 minutes.

OBJECTIVES: Day 20

Groups are to read the Science Fair pages to class. Comment/questions for five minutes per group. Teachers give ideas about how to make models for the Science Fair. After groups' discussion about what kind of model they could make for the Science Fair, each group shares with class how they are going to illustrate the hypothesis they have stated to be proved or disproved. Each group is to spend the remaining period writing down the types of materials they will need and whether or not they can provide the materials. If they can't, they need to make a list for the teachers to provide.

OBJECTIVES: Day 21

Each group begins the model(s) to be presented at the Science Fair; teachers are to "float" around the room using a question technique to check ideas. Some groups will need to restructure the model idea in order for the model to illustrate what their books tell.

OBJECTIVES: Day 22

Groups are to continue with models until the last 20 minutes of the period. Groups are to clean up and come to the center of the room for discussion. Discussion will begin about the progress of the models. Comments about working in Cooperative Learning groups will end the discussion period.

OBJECTIVES: Day 23

Groups are to continue working on the models. Each group automatically re-elects new jobs for each member as they begin each day's assignment. Teachers are to meet with each group as work goes on, to make sure the social interactions designed for positive interaction are taking place, and the models are becoming a finished product.

OBJECTIVES: Day 24

Teachers regroup for a new assignment. Students are given 2 minutes to choose new jobs, then teachers give new assignment. All groups are to write on index cards ten questions for a Trivial Pursuit game using the information students have learned about volcanoes. Before the groups begin, the students are to brainstorm what types of information that could be included in the questions. Groups share the questions during the last 15 minutes of the class period.

OBJECTIVES: Day 25

Students continue with the questions and answers for the Trivial Pursuit game. This game will be placed in the Science Fair with the Volcano books and the working models proving the hypothesis.

At the end of the Volcano Unit the students are to discuss the ways the Cooperative Learning groups helped them learn about the subject matter and how Cooperative Learning helped them as a group member. The ending activity is a trip to the Science Fair in Chico, California, and a picnic in Bidwell Park.

SCIENCE: TAKE ME TO YOUR LITER

Mary A. Anderson
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GRADE LEVEL: 4-6th grade SUBJECT: General Science

GROUP SIZE: Four students per group.

ASSIGNMENT TO GROUPS: Each group should consist of one high achieving student, two medium achieving students, and one low achieving student. Teacher assignment of group composition helps to eliminate arguments and eliminate students' anxiety about not being chosen. Wait until after the science lesson has been introduced and all discussion on social skills has been completed to assign students to a particular group.

ROOM ARRANGEMENT: Each group works around all sides of a table. If tables are not available four desks may be moved together to create a working space. One area of the room is designated for supplies.

MATERIALS NEEDED: One science worksheet per group, one set of job cards per group, one teacher observation sheet, student evaluation for each student, and the Measurement Module "Take Me To Your Liter" from the SAVI/SELPH Science Program. This module contains the following for each group of four students:

2	half-liter plastic containers ("cottage cheese" size)
1	large vial or one small vial (provide a different size for different groups)
1	200 ml beaker
1	50 ml syringe
1	50 ml graduated cylinder
1	"coffee cup"
1	large plastic tray
1	pitcher
1	1000 ml beaker
1	soda can
	paper towels

The activity, "Take Me To Your Liter", is one of forty activities in the SAVI/SELPH Program (Science Activities for the Visually Impaired/Science Enrichment for Learners with Physical Handicaps) developed and distributed by the Center for Multisensory Learning, Lawrence Hall of Science, University of California, Berkeley, 94720, 415/642-8941.

SETTING THE LESSON

TASK STATEMENT: Today we are going to work with measurement. In front of whole class fill one coffee cup to the brim with water. Say "This cup is filled to capacity. How could we measure the capacity of the cup?"

GROUP GOAL: Students will fulfill their assigned group jobs as they complete the experiment.

CRITERIA FOR SUCCESS:

1. Step by step progression to complete the worksheet.
2. Proper use of the equipment for measuring.
3. Assignment of a role to each person in the group.
4. Encouraging each member to fulfill their role.

SPECIFIC BEHAVIORS EXPECTED: Students are expected to use equipment properly, to encourage group members to each do their jobs, and to take turns using the equipment.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. If you use the equipment properly, everyone in your group will use it to complete the tasks on the worksheet. Give some examples showing the equipment and pantomiming a step. Ask students if what was done would be the proper way to use the equipment.

2. Discuss how to pass out the job cards. Stress picking out a job that is different from the job they had for the last science lesson. Ask student, "How can you encourage members to do their job in the group?" Possible responses might be "tell someone they are needed to do the job," or "time for you to do your job," or "that was the right thing to do," or "thank you for doing that," etc.

3. Tell students that during the lesson the teacher will be gathering data on the success criteria that have been discussed. Also, state that the teacher will be available to answer questions if no one in the group is able to answer the questions. However, other group members are to be asked before asking the teacher.

JOB CARDS

READER Reads the worksheet and checks the boxes after each step is completed.	CHECKER Asks people, "Do you understand?" If a question cannot be anwered by the group, the checker refers it to the teacher.
SETUP Gets the materials needed by the group.	FACILITATOR Organizes the group so everyone gets a turn doing the science activity.

PROCEDURE: "In your group you will be using a vial to measure the capacity of your coffee cup. Later you will measure in liters and milliliters. You will have a worksheet which will give you step by step instructions on what to do. After you finish each step check the box and go on the next step."

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

1. Checking boxes as they follow each step of the worksheet.
2. Using equipment properly.
3. Discussion and distribution of job cards.
4. Use of encouraging comments concerning roles to other members.

OBSERVER(S): Teacher is to act as the observer, using the observation sheet for recording student behavior and comments.

OBSERVATION FORMAT: Put names of group members in rows and the skills in columns. Skills could include: step by step worksheet, proper use of equipment, assign roles, encourage roles. You may add a column for comments.

OBSERVATION SHEET

NAMES:	SKILL: Step by step work	SKILL: Proper use of equipment	SKILL: Assign roles	SKILL: Encourage roles	COMMENTS & PROBLEMS:

PLANS FOR PROCESSING: Discussion of the science objectives for the lesson. Students report the results of their measuring. Discuss differences and why there was a discrepancy in the capacity of the coffee cups. Discuss the liter as the metric standard for measuring volume. Introduce "volume" as the metric standard for measuring volume. Introduce "volume" as the amount of water that was measured. Randomly check on understanding of concepts and the activity.

Teacher feedback is to be given in reporting what was recorded on the observation sheet. Quote students directly and describe their actions to point out good examples. Students are to report on their observation of specific skills. Students will refer to their evaluation that they complete at the end of the lesson. From this, problems in the group and goals for next time are developed.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Loud talking and arguing over job assignments, forgetting to encourage each group member to do their job.

OBSERVED PROBLEMS: Not many encouraging comments.

POSSIBLE INTERVENTIONS: During processing ask group members to give examples they heard in their group of encouraging comments. When only a few can be recalled, ask the group why this might be so. (Perhaps there were not many encouraging comments because interest in the measuring took preeminence and encouraging comments were forgotten.)

ACTUAL INTERVENTIONS: From the lack of examples a goal for next time was to continue to work on encouraging comments about roles. A list of the benefits of giving encouraging comments was made.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Not only should the measuring activites have been completed but also the concepts of volume and capacity. The standard metric units of liter and milliliter should be understood.

GROUP FUNCTIONING: Each experience working together makes the next one easier. Students become familiar with the format of a worksheet and with using the equipment. As they see the observation sheet giving them feedback on their behavior, they are able to change that behavior.

NOTES ON INDVIDUALS: At first, students practice the social skills when the observer approaches with the observation sheet. But gradually they get into the habit of encouraging others.

SUGGESTIONS FOR NEXT TIME: Follow-up with questions such as "If you drink three coffee-cupfuls of lemonade, how many milliliters have you consumed?"

Add one new social skill, and discard a social skill that becomes automatic. Keep the groups progressing so they advance to higher level social skills.

Remember to emphasize and praise groups that work on the criteria set up in the beginning of the lesson.

WORKSHEET FOR TAKE ME TO YOUR LITER

☐ Check the box as you follow the direction.

☐ If a cup is filled to capacity it is______________________________

☐ Get a cup and fill it to capacity with water.

☐ Measure the number of vialfuls of water in your cup.

☐ Record the capacity of the cup using the vials as the unit of measurement. ______________________________

☐ What is the metric standard for measuring volume?______________

☐ What would the problem be if you used the liter to measure the capacity of your coffee cup?______________________________

☐ Smaller amounts are measured in milliliters. Get a 100 ml beaker.

☐ How many milliliters are in a liter?______________________

☐ Measure the capacity of your coffee cup in milliliters.

☐ Record your results. ______________________________

☐ Get a partly filled coffee cup from the supply area. Measure the volume of water in this cup and record results.

☐ Fill your soda can with water. Using the syringe and a graduated cylinder measure the volume of liquid in the can.

☐ What is the capacity of the soda can in milliliters?______________

☐ What is the amount of soda the can says you can get when you buy it?

☐ Why is there a difference in these two amounts? ______________

____

☐ Return all of your equipment to the supply area.

☐ Use paper towels to clean the table top.

☐ Sign this sheet if you understand the things you have done.

☐ Each group member is to fill out an evaluation sheet and be ready for the class evaluation.

STUDENT EVALUATION

One science fact I learned about capacity is ______________________________

____

One science fact I learned about a standard is ______________________________

____

One science fact I learned about measuring volume is ______________________________

____

My job in the group was:

Reader ☐

Checker ☐

Setup ☐

Facilitator ☐

One thing our group did well was ______________________________

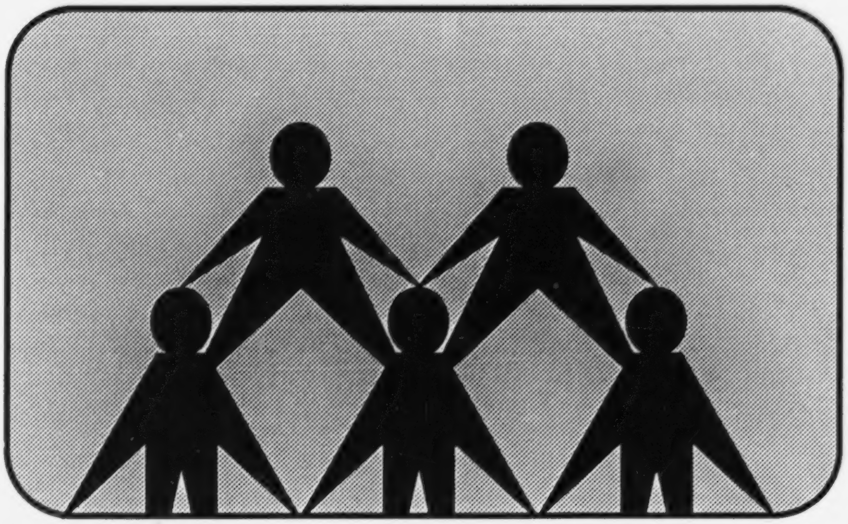
____

A problem I noticed in our group was ______________________________

____

A goal for our group next time should be ______________________________

____



COOPERATIVE
LEARNING
LESSON
PLANS

History/Social Science

OUR UNITED STATES

Patricia McLoughlin
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GRADE LEVEL: Second - Fourth grades SUBJECT: Social Studies/Geography

GROUP SIZE: Four students

ASSIGNMENT TO GROUPS: Teacher should try to structure each group with one top student, one low student, and two average students.

ROOM ARRANGEMENT: Desks in a circle, or have students sit around a table.

MATERIALS NEEDED:

For each group -
- One 12 x 18 in. piece of construction paper to be folded in half for booklet.
- One set of role cards per group.
- One map of the United States (to go on front cover).
- One map of Northeastern states (last page of booklet).
- One Introduction.

For each student -
- Six state maps (one state each day, two on Monday).
- Six question sheets.

SETTING THE LESSON

TASK STATEMENT: Each day every member of each group will learn the name of one New England state and its location on the United States map. A question sheet about the studied state will be completed daily.

GROUP GOAL: Each group will hand in one completed booklet on the six New England states at the end of the week. (Resource Interdependence.)

CRITERIA FOR SUCCESS: The booklet must contain a cover map; introductory page; colored map of each state; question sheet for each state answered completely, correctly, and neatly; and final map page. It is due on Friday. Late booklets will be marked down one grade per day late.

SPECIFIC BEHAVIORS EXPECTED: Each member participates by completing his/her individual task assigned on the role card. Each student remains with the group and demonstrates good listening skills.

THE LESSON

PROCEDURE:

- The teacher will introduce the lesson by showing the class an overhead projection of the United States and pointing out the six states they will begin studying for the week. Go over introductory page. Explain directions. Discuss that the New England states are part of the Northeastern states. Pass out Main Map and worksheet. Do together as an example of what the groups will do on their own for the rest of the week.
- Explain how they will be 1) Positively interdependent (to complete one booklet), 2) Individually accountable (for all material as all students may be asked to fill in a blank map on a progressive test), and 3) Accountable for social skills of the group.
- The teachers should explain the role cards, shuffle them, and deal out at random within each group. Pass out materials to each group.

ROLE CARDS

BOOKLET MAKER/HELPER

1. Keep completed pages each day and assemble booklet on Friday.
2. Label and color New England States on US map and paste on cover.
3. Helps gp. members to know the location of each state.

READER/PRAISER

1. Reads the state page each day orally to group.
2. Reads questions and asks for answers.
3. Praises members who do assigned roles well.

RECORDER/CHECKER

1. Record group's answers on main question sheet for each state each day. Use best handwriting.
2. Check to make sure everyone agrees with and understands answers.

COLORER/OBSERVER

(more a reminder)

1. Color each state map daily.
2. Label and color final map page.
3. Remind members to remain on task if observed off task.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Each group should be on task. Members should be listening as the reader reads, contributing as recorder records, coloring assigned papers, checking, praising, helping, and reminding.

OBSERVER: Teacher.

OBSERVATION FORMAT: Indentifies for each day, Monday through Friday, Recorder/Checker, Reader/Praiser, Booklet Maker/Helper, Colorer/Reminder.

PLANS FOR PROCESSING: The teacher monitors by circulating to each group, telling them how they are doing. The teacher cites individual and group strengths and weaknesses as noted on observation form.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Students may not do work, may not pay attention to the other members of their group, or there might be discipline problems.

OBSERVED PROBLEMS: One student was unhappy with the role he was assigned. Also, there was a tendency for the more aggressive students to do all the work while one or two students "kicked back".

POSSIBLE INTERVENTIONS: The teacher can remind the students that each will receive the same grade on the one completed booklet they are working on as a team. Each member is responsible for individually naming and locating the states studied as there may be spot checks or a progressive test at the end. Students should also be reminded that they are being evaluated on their checker, praiser, observer, helper skills, and how well they help each other individually and as a group.

ACTUAL INTERVENTIONS: The assigned roles can be rotated upon approval by the group. To shape up the less aggressive workers, I give a surprize quiz on map labeling and questions over material studied during the week.

LESSON EVALUATION

TASK ACHIEVEMENT: All booklets were completed on time with varying degrees of accuracy.

NOTES ON INDIVIDUALS: GATE students preferred to work individually so the social skills grade proved a necessary motivator. Lazy students tried to get "a free ride" which demanded a lot of encouragement from fellow group members.

SUGGESTIONS FOR NEXT TIME: Change role cards each time a new section of the United States is studied. Ask students for suggestions that would facilitate the group learning process.

Questions About Maine

1. What is the capital of Maine?______________________________

2. What is the largest city in Maine?___________________________

3. Why do people like to go to Maine for summer vacations? ______________

____ .

4. What are the important forest products from Maine? _______________

_____________, _____________, and ___________________________ .

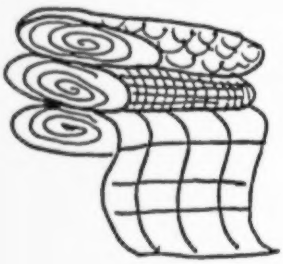
5. Name two important crops grown in Maine: ________________________ .

6. Fishermen catch ____________________, small ______________________,

and soft shell ______________________ for freezing and canning.

7. Maine factories make ________________, ___________________________,

_________________________, and ___________________________________ .



MAINE

State Flower: Pine cone and tassel State bird: Chickadee

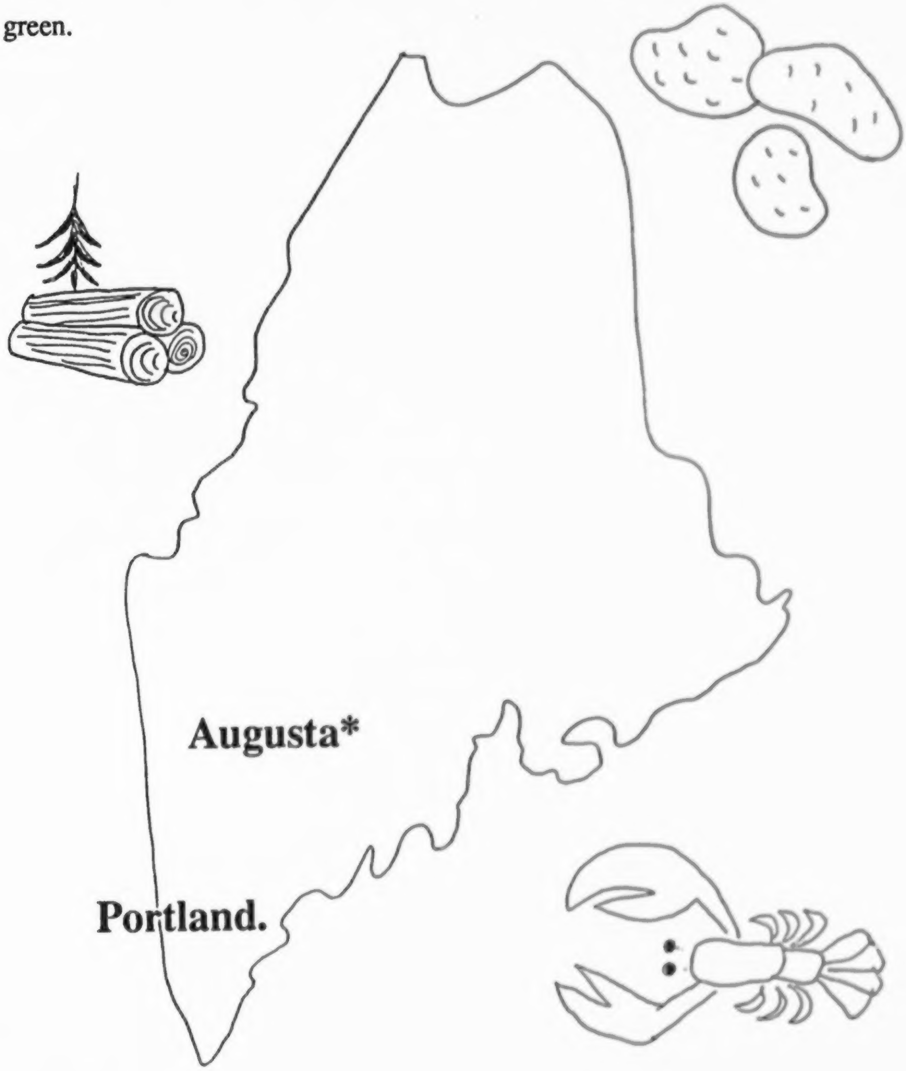
Maine is the largest of the six New England states. People come to Maine for summer vacations because of its many lakes, streams, islands, mountains, forests, and beaches.

Forest products include toothpicks, paper, lumber, and Christmas trees.

Blueberries and potatoes are two important crops grown in Maine. Farmers also raise vegetables, apples, and chickens.

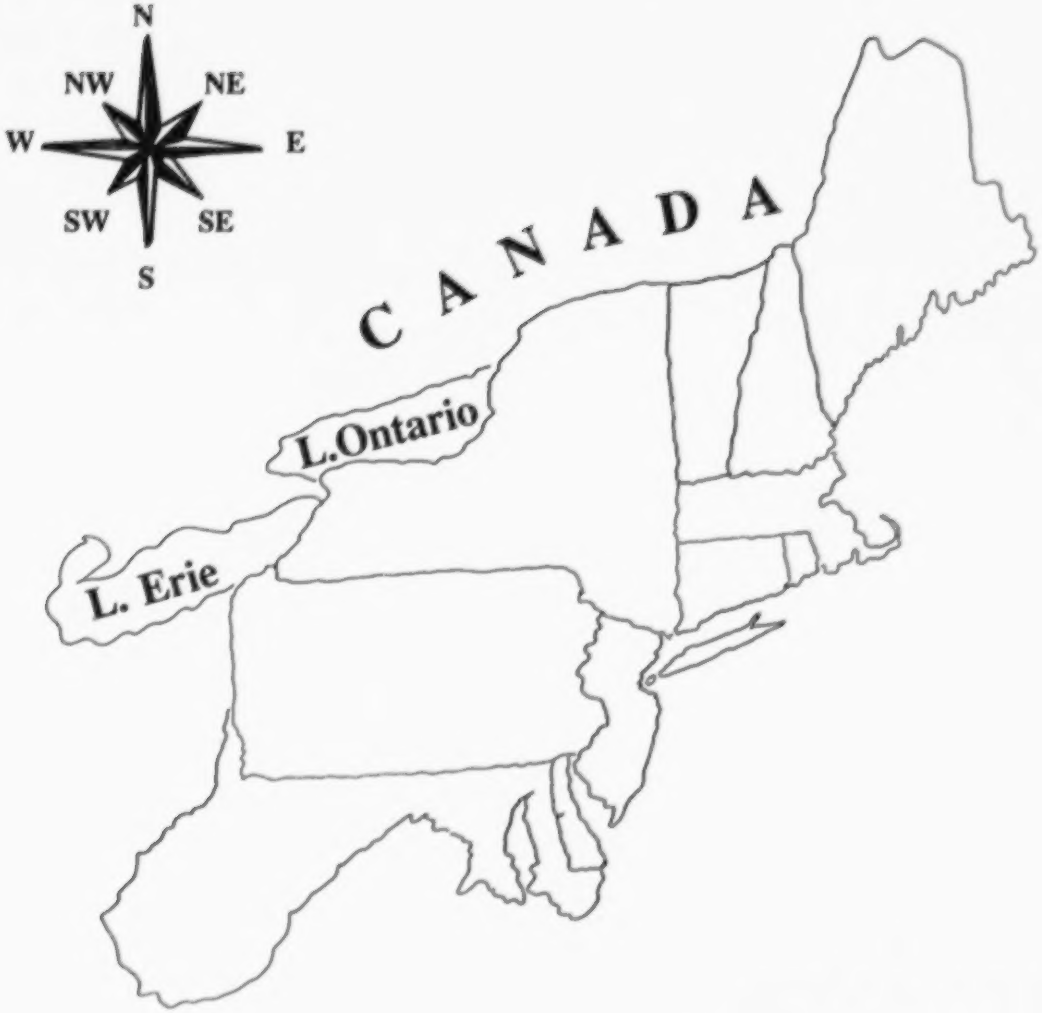
Fisherman catch big lobsters, small sardines, and most of our soft shell clams for freezing and canning of seafood. Maine factories make furniture, shoes, cloth, and boats.

Color Maine green.



OUR UNITED STATES

NORTHEASTERN STATES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EXPLORING THE CONTINENTS

Shirley Ronkowski
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GRADE LEVEL: 5th - 6th SUBJECT: Social Studies/Geography

GROUP SIZE: This lesson plan is designed for 30 students in six groups* consisting of five members each. Smaller groups would work well but larger groups would require more questions under each topic of the accompanying question sheet.

ASSIGNMENT TO GROUPS: Students of varying skill levels should be assigned to each group. It can be helpful to keep a list of group assignments so that the make up of future groups can be varied.

Group assignments can be written on the board and each group named after a continent. The lists can be covered by a wall map or projector screen until students are asked to move their desks into groups. A map of the classroom, also drawn on the board before class, can designate where each group is to meet.

ROOM ARRANGEMENT: Desks should be arranged in six groups* of five. Group locations can mimic the actual location of continents. For example, the group assigned to explore North America would meet in the front corner of the room and the group exploring South America would meet behind them. In other words, the north American group would be north of the South American group, the European group would be east and so on. A place for an Antarctica group should be made even though no students are assigned to that continent due to its lack of variation in borders, climate and land forms.

MATERIALS NEEDED:

1. Exploring the Continents Question Sheets - two for each student
2. Group Working Skills feedback sheet - two for each group
3. Master Answer Sheets for each continent
4. Student textbooks that include an extensive atlas

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* Although there are seven continents, only six groups are formed. This is because some of the topics on the question sheet (e.g., land forms and climate) have numerous questions that aren't applicable to Antarctica. Therefore, Antarctica is best used as an example for the class.

SETTING THE LESSON

TASK STATEMENT: Each member of the expedition will be asked to fill out a question sheet for the continent it is named after.

GROUP GOAL: The group goal is to work cooperatively and effectively on the question sheet so that all members receive 85% or better on the second question sheet that students answer individually. Meeting this goal results in five extra points for good group skills and/or five extra points for academic accomplishment.

CRITERIA FOR SUCCESS: Success for the group work is measured by the quality of academic performance and group working skills. expected level of success has been achieved when (1) all members receive 85% or better on the second question sheet completed on an individual basis and (2) when both group and teacher evaluations of group working skills concur on good to excellent ratings for all group skills.

SPECIFIC BEHAVIORS EXPECTED: Five specific group working skills are expected of students and they are evaluated on these skills by the teacher and by themselves as a group.
Those behaviors are:

> **Checking**: Students are expected to check with one another to be sure that all members of the group understand the correct answers to question sheet questions and how those answers were derived.
>
> **Turn Taking**: Students are expected to take turns in figuring out the answers to question sheet questions. There are five questions under each question sheet topic and five or less members per group. Therefore, each member of the group should be given the opportunity to lead the group in answering at least one question per topic.
>
> **Encouraging and helping**: Students are expected to encourage and help one another in completing the question sheet. When behaviors that are less than encouraging occur, the teacher can refocus the behavior toward the positively stated behaviors of encouraging and helping. In other words, rather than pointing out that a particular student comment was discouraging or nasty, the teacher can reframe the situation by asking the student how s/he could encourage or help the student having difficulty.
>
> **Staying On Task**: All conversation is expected to be related to the questions on the question sheet or to the general topic of continents. Other topics of conversation are appropriate only after the group has completed all of the tasks required in the lesson.
>
> **Cooperation**: Working in groups is bound to surface some disagreements or difficulties. Effective groups are those that can work out or in some way solve their difficulties to the satisfaction of all groups members.

THE LESSON

PROCEDURE: "Today we're going to become explorers and explore the seven continents. Explorers travel in groups called expeditions so you've each been assigned to an expedition.

Since you're all exploring together, you'll need to help one another find the answers to the question sheet. Although you won't be graded on this sheet, you will be graded on a second question sheet that you will complete individually. If you understand how to answer the questions in the first continent you explore, you'll be able to answer the questions about other continents.

If everyone in your original expedition gets a grade of 85% or better on the second question sheet, every person in the expedition will receive an extra five points. Can you think of some reasons why the whole group should get extra points if each member does well individually?

Explorers are very often exposed to a great deal of danger as they travel to unknown areas of the world. Their ability to work together and help one another can determine whether or not they are successful in their exploring. Your ability to work well with others is important, too. In a minute, I'll hand out group work. Later I will ask you to evaluate how well you have worked together and I will be evaluating you, also. If your group and I agree that the group has earned ratings of good to excellent in all the skills, you will each receive an extra five points on your grade. So, by working together and helping one another, it's possible for each of you to earn an extra 10 points today: five for good group skills and five for doing well on the question sheet.

Do you have any questions?

Before you begin your explorations, let's go over the instructions on the question sheet. Every person in your expedition should have a question sheet and each person should write the answers on his or her own sheet even though you are working together to find the answers.

We'll quickly go through the question sheet as a class and give the answers for Antarctica since there has not been an expedition assigned to that continent.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Students are given a list and description of the expected behaviors on the Group Working Skills sheet. It is helpful to go over these skills by asking students to come up with example phrases that would fit in each of the five skill categories. For example, comments that would indicate checking would be, "Does everyone understand this answer?" or "Is anyone confused?" or "Would anyone like to go over how we got this answer?" It can be helpful to discuss how some of these checking behaviors might be better than others. For instance, students can be asked how they would feel answering the question "Who doesn't know this?" vs. the question "Who's not very sure of how we got this answer?"

OBSERVATION FORMAT: Using the same observation form for teacher and student ratings of the group's performance is meant to point up the fact that students are expected to evaluate and modify their own behavior. The group skills list reinforces the idea that there are specific criteria on which behavior can be evaluated. The teacher's ratings of the group's cooperation skills not only provides an evaluation of the group's performance but also serves as a model of how to make evaluations. It is also hoped that this method gives students a sense of fair play and helps reinforce the idea that the teacher's evaluations are made as a result of observations and not based on how well s/he likes a particular student.

This observation form can be used for other lessons as well. Using the same evaluation criteria and the same evaluation format for numerous lessons serves to reinforce expected behaviors and to provide students with opportunities to practice and receive feedback on this set of group skills.

OBSERVER(S): Both teacher and students are asked to observe and rate group skills. When students know that they will be asked to rate themselves, it is hoped that they will be more conscious of using the specific skills on which they will be evaluating themselves.

PLANS FOR PROCESSING: Since the teacher must meet with individual groups to compare and discuss the observational forms, time for this must be built into the lesson plan. An easy way to do this is to announce the homework assignment and allow students to begin working on it while the teacher meets with individual groups.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Two main problems can occur in group work: hostilities between group members arise or a group member refuses to participate. This refusal may be verbal or nonverbal. When a problem does occur, further difficulties can follow as other group members become annoyed or frustrated in their attempts to eradicate the initial disturbance.

OBSERVED PROBLEMS: The above problems are not only possible, they are probable in a class that has not done group work before. However, these difficulties can be used as learning opportunities. Over time the experiences can build and noticeable improvements by individual students become discernable.

POSSIBLE INTERVENTIONS: Of course, the least obtrusive interventions are nonverbal: the teacher noticeably watching a group, standing very near the group, and sitting with the group. If these methods don't serve to pressure students into resolving the difficulty, the teacher can help students by inquiring into the situation and helping students define their problem in a variety of ways so that a wider variety of solutions can be seen. In many situations the teacher may have to prime the pump of problem solving by offering some possible or not so possible solutions. A difficult situation can sometimes be lightened and tempers cooled when the teacher offers some outrageously silly solutions.

ACTUAL INTERVENTIONS: Bargains can sometimes be struck with individuals in the group. Fo example, some students will agree to give up an argument when offered a chance to choose their own group for the next group lesson or to be the lunch leader. However, I have experienced repercussions when I have made a bargin with the student who is "causing" the problem and not with other students who are involved in the difficulty.

I have also allowed students to break the rules in order to reach a viable solution. For instance, one group that was having severe difficulties was allowed to split into two groups to complete the question sheet with the proviso that the two subgroups had to compare their question sheet answers and work out any discrepancies.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Usually all or nearly all groups achieve the academic group goal in this lesson. The question sheet is not difficult for students if they have been given some review in geography before given this lesson. Time limitations combined with group disagreements account for the occasional lack of success in meeting the academic goal.

GROUP FUNCTIONING: Some groups do have difficulty with the group skills but after only two or three lessons emphasizing these five group skills and using the same evaluation format, the degree of student improvement is obvious.

NOTES IN INDIVIDUALS: In one severe case, extended bargaining was needed. The student was initially unwilling to sit in a group, let alone work in one. We finally agreed that he would work with one other person of his choice, rather than with a whole group of four or five people. The next time the class worked in groups, we again negotiated, and he agreed to again work in a dyad, but with a student he had not worked with before. Later, he was willing to work with two others and so on. Before the end of the year, he was working effectively in groups of four and five members. Both he and I felt a lot of satisfaction in that accomplishment.

SUGGESTIONS FOR NEXT TIME: An alternative is to have groups of seven students. Each completes a question sheet on one of the continents. Group members check each other's work. Groups then take a test on all the continents. The bonus points for grades and group skills can still apply.

A second lesson can utilize the materials from Exploring the Continents. Have students use the question sheets from this lesson to make comparisons between the continents. A comparison sheet can be constructed by the teacher or by the whole class.

EXPORING THE CONTINENTS
Question Sheet

EXPLORER: ____________ **CONTINENT TO BE EXPLORED:** ____________

INSTRUCTIONS:

1. Use the atlas in your text book to find the answers to these questions. For each topic below, each explorer **takes a turn** leading the expedition in finding the correct answer to one of the questions.
2. When you've finished this sheet, correct your answers according to the **Master Answer Sheet.**
3. Fill out the Group Working Skills sheet. If your group and the teacher agree that your group has earned good or excellent ratings in all skills, each member of the expedition will receive **five extra grade points.**
4. Each explorer will then venture out to another continent. When your expedition is ready for individual assignment, raise your hands and the teacher will provide you question sheets. This second question sheet will be graded. If all explorers in your orginal expedition are able to answer the second question sheet with 85% accuracy, each member of the expedition will receive **five extra grade points.**

TOPIC 1: Continent Location

__________ In how many **hemispheres** is this continent located?

__________ What is the **latitude** of the most **northerly** point of this continent?

__________ What is the **latitude** of the most **southerly** point of this continent?

__________ What is the **longitude** of the most **westerly** point of this continent?

__________ What is the **longitude** of the most **easterly** point of this continent?

TOPIC 2: Continent Climate

__________ How many different climates does this continent have?

__________ What is the largest climate zone on this continent?

__________ What is the smallest climate zone on this continent?

__________ Which coast of this continent (east or west) gets the most rain?

__________ Which climate area would be best for growing food?

TOPIC 3: Continent Borders

____________________ What is the northern border of this continent?

____________________ What is the southern border of this continent?

&____________________

____________________ What is the eastern border of this continent?

____________________ What is the western border of this continent?

____________________ Which border would you most like to live near?
Why?

TOPIC 5: Continental Experiences

____________________ What might you see on this continent that you might not see on some of the other continents?

____________________ What are two languages you might frequently hear on this continent?

____________________ What might you want to do on this continent that you might not be able to do on some of the others?

____________________ What object does the shape of this continent resemble?

____________________ How does this continent rank with the others in size?

GROUP WORKING SKILLS

GROUP NAME ______________________________

CHECKING: Group members checked with one another to be sure that everyone in the group understood the answer for each question.

____ excellent ____ good ____ fair ____ poor

Comments: ______________________________

____

TURN TAKING: Each group member was given a turn to lead the group in answering one question on each continent topic.

____ excellent ____ good ____ fair ____ poor

Comments: ______________________________

____

ENCOURAGING AND HELPING: Group members encouraged and helped one another in completing the activity sheet.

____ excellent ____ good ____ fair ____ poor

Comments: ______________________________

____

STAYING ON TASK: All conversation was related to the activity sheet until it was finished.

____ excellent ____ good ____ fair ____ poor

Comments: ______________________________

____

COOPERATION: Disagreements were talked about and worked out to the satisfaction of all group members.

____ excellent ____ good ____ fair ____ poor

Comments: ______________________________

____

POLITICAL CARTOONS

Judy Endeman
Assistant Superintendent
Ramona Unified School District
Ramona, CA

GRADE LEVEL: 7-12 SUBJECT: History

GROUP SIZE: 4 per group.

ASSIGNMENT TO GROUPS: One low ability student, one high ability student, and two average ability students.

MATERIALS NEEDED:

- Handouts.
- Sample of Political Cartoons - Transparencies.
- Overhead Projector.

SETTING THE LESSON

TASK STATEMENT: Over a two day period, students will be able to:

- Write definitions for the term "political cartoon", "caricature", "symbols".
- Point out examples of each of the above.
- Correctly identify the BEST interpretation of a political cartoon.
- Cooperatively write a complete explanatory paragraph about a political cartoon.

GROUP GOAL: Each group will demonstrate courtesy by listening to each other, contributing ideas, and encouraging others.

CRITERIA FOR SUCCESS:

- Content Learned: 10 minute quiz.
- Behavior Learned: Process Sheet #2

Your quiz at the end will be a combined score of all four students.

SPECIFIC BEHAVIORS EXPECTED: "For this task we'll work cooperatively. The group will combine their answers on numbers one through three, and write a paragraph together. Only one worksheet will be handed in for the group. Each member will sign that they understand and agree with the answers."

"The quiz will be taken independently and a total score given to each member of the group."

"The group skills we're working on are listening to each other's ideas, contributing, and encouraging each other."

THE LESSON

MANAGEMENT SUGGESTIONS:

- Assign roles of recorder, reporter, feedback person and chairperson who acts as the group facilitator.
- Have prepared a number of political cartoons taken from the current daily newspaper to use as examples. You will need to make transparencies of these cartoons and have an overhead projector available.

PROCEDURE:

Day 1

Have a newpaper. Say, "I bet I know a part of the paper that most of you read every day. What do you guess?"

Show visual of political cartoon. Introduce vocabulary:

Political Cartoon
Caricature
Symbols
Script

Show visuals of several and let students "read" them using clues taught before.

Give students the homework page and ask them to share it with parents and do numbers one through three as homework in preparation for cooperatively working on number four tomorrow.

Day 2

Have students meet in groups to discuss and exchange answers for numbers one through three, then to work together to write an explanatory paragraph. Review paragraph form:

Topic Sentence
Supporting Details
Concluding or "Clencher" Sentence

Tell them that they'll be responsible for a short quiz the last 10 minutes of the period.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- Completed Worksheet signed off by all members of each group.
- Members listen to each others ideas.
- All members contribute ideas.
- Members encourage each other.

OBSERVATION FORMAT: None.

OBSERVER(S): Teacher monitors. It's important if groups show signs of being confused or stuck to refer them to vocabulary and clues learned from previous day using questioning techniques. Modeling of encouraging statements for good critical thinking is done as you monitor groups.

PLANS FOR PROCESSING:

Content: Groups report to class on their cartoon, using visuals. This is the practice and reteaching session for teacher. Give quiz and process sheet #2.

Behavior: After students take quiz and complete self-evaluation forms for each group, teacher uses visual of process sheet and asks each group to report on progress using three objectives.

PROBLEMS AND INTERVENTIONS

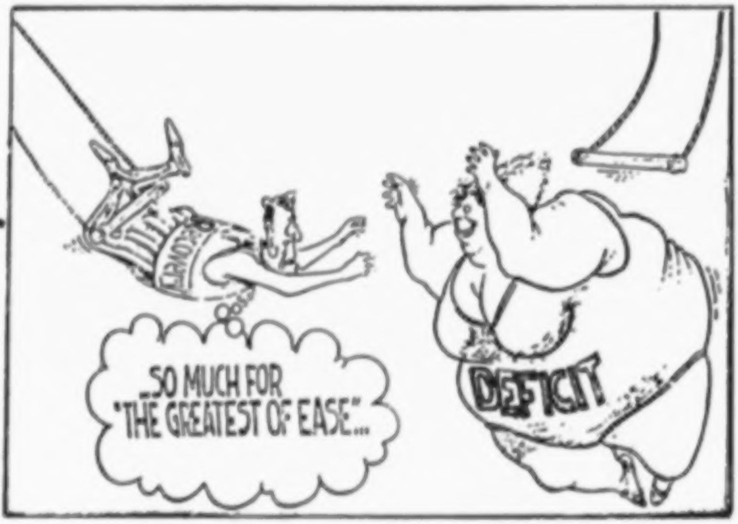
OBSERVED PROBLEMS: In one class, the lesson went more quickly than expected so there was time remaining at the end of the period. However, in another class there was not enough time for presentation of all the sample political cartoons in the direct instruction phase of the lesson.

ACTUAL INTERVENTIONS: Where extra time was remaining, time was utilized for additonal feedback and discussion.

POLITICAL CARTOONS

A **political** or **editorial** cartoon encourages readers to develop opinions about something prominent in the news. Many political cartoons, call **caricatures**, poke fun at well-known people by exaggerating their physical characteristics.

Cartoonists use a variety of **symbols** to help get their message across. The **script** of a cartoon usually consists of only a few words, if any.

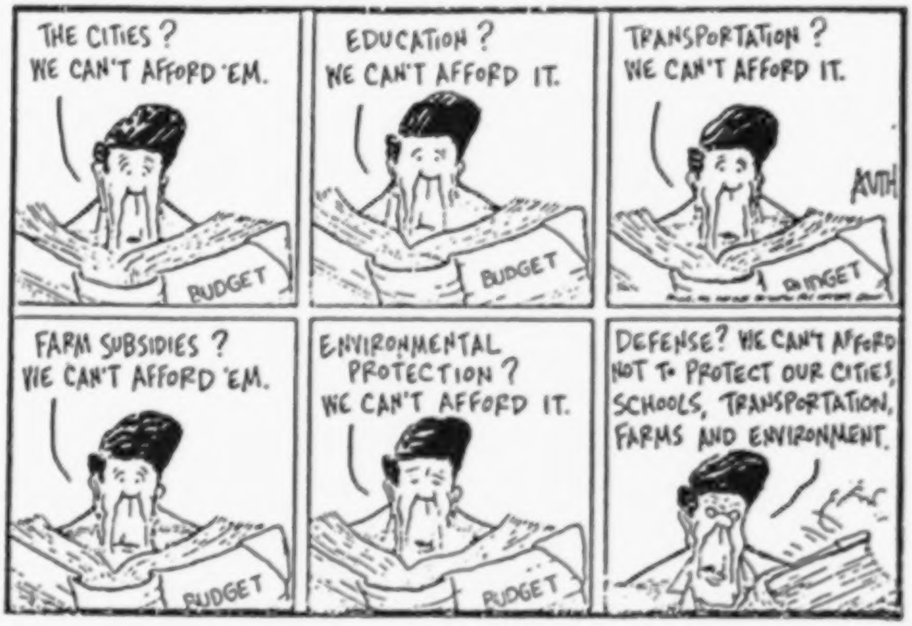

...SO MUCH FOR "THE GREATEST OF EASE"...
DEFICIT

Caricature of Reagan.

Symbols stars & stripes.

Symbol grossly overweight woman= deficit budget.

1. Study the political cartoon on the back carefully, looking for caricatures and symbols, and reading the script for meaning.
2. Show your cartoon to your parents and ask them what they feel it's about.
3. Answer questions number one to number three as homework and come prepared to write a paragraph answer for number four.
4. After writing your paragraph, you will meet in cooperative learning groups to share your cartoon and explain to others what it illustrates.
5. Each member of the group will be responsible for answering questions about how to "read" a political cartoon.

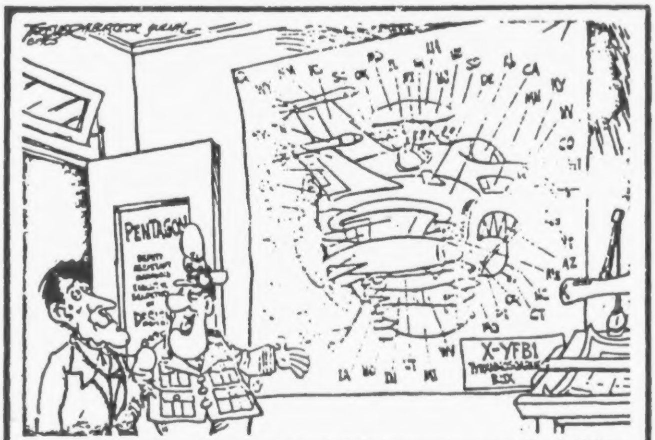

THE CITIES ? WE CAN'T AFFORD 'EM.
BUDGET
EDUCATION ? WE CAN'T AFFORD IT.
BUDGET
TRANSPORTATION ? WE CAN'T AFFORD IT.
AUTH
BUDGET
FARM SUBSIDIES ? WE CAN'T AFFORD 'EM.
BUDGET
ENVIRONMENTAL PROTECTION ? WE CAN'T AFFORD IT.
BUDGET
DEFENSE? WE CAN'T AFFORD NOT TO PROTECT OUR CITIES, SCHOOLS, TRANSPORTATION, FARMS AND ENVIRONMENT.

1. What political or social issue or problem of today is illustrated by the cartoon?

2. What famous people, if any, are caricatured in the cartoon?

3. What symbols are used to help the viewer understand the issue?

4. Write a paragraph explaining what you feel cartoonist is trying to say with this drawing.



"At last! A weapons system absolutely impervious to attack: It has components manufactured in all 435 congressional districts!"

1. What political or social issue or problem of today is illustrated by the cartoon?

   ____

2. What famous people, if any, are caricatured in the cartoon?

   ____

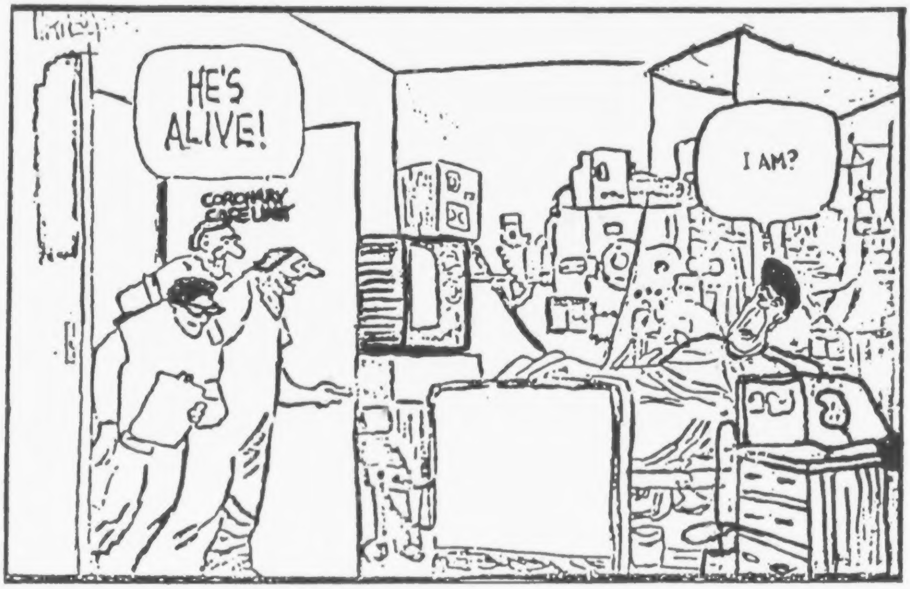
3. What symbols are used to help the viewer understand the issue?

   ____

   ____

   ____

4. Write a paragraph explaining what you feel cartoonist is trying to say with this drawing.



HE'S ALIVE!
CORONARY CARE UNIT
I AM?

1. What political or social issue or problem of today is illustrated by the cartoon?

2. What famous people, if any, are caricatured in the cartoon?

3. What symbols are used to help the viewer understand the issue?

4. Write a paragraph explaining what you feel cartoonist is trying to say with this drawing.

BUYING AMERICAN

Susan Thorkelson
Turlock Junior High School
Turlock Joint Union High School District
Turlock, CA

GRADE LEVEL: Seventh - Eighth grades SUBJECT: History/Social Studies

GROUP SIZE: Four students

ASSIGNMENT TO GROUPS: Preassigned heterogeneous grouping.

ROOM ARRANGEMENT: Pull four student desks together to form a cross.

MATERIALS NEEDED: Art Buchwald article, question sheet, and Individual Checklist.

SETTING THE LESSON

TASK STATEMENT: Students will examine attitudes toward competition between American and foreign made goods sold in the United States.

GROUP GOAL: Each group will reach consensus on all seven questions over the Art Buchwald newspaper column.

CRITERIA FOR SUCCESS: Each group member answers all questions completely and can support answers with examples from the article.

SPECIFIC BEHAVIORS EXPECTED: "I will be observing all groups to see if each member is fulfilling his/her role and giving encouragement and support to the other group members."

THE LESSON

PROCEDURE: Read the accompanying article by Art Buchwald. Discuss and answer the questions that follow and share answers with the large group. You will have the following roles in your group:

1. Question Reader
2. Checker
3. Encourager and Praiser
4. Encourager and Praiser.

After reading:

1. Question Reader reads each question, which is followed by discussion and consensus.
2. Each student writes the answer.
3. Checker makes sure everyone agrees and can support the answer with evidence from the article.
4. Group member #3 stands up and shares the answer to one of the questions. (This is an opportunity for comments and questions from other groups.)
5. Hand in all papers. One paper from each group is graded.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Group members should work together quietly and efficiently in their assigned roles actively discussing the article.

OBSERVER: Teacher.

OBSERVATION FORMAT: Teacher takes notes on group behaviors.

PLANS FOR PROCESSING:

1. Teacher shares written observations and positive comments overheard in groups.
2. Students complete checklist individually. (1 minute.) On the next page.
3. Each group discusses what went well, according to the checklist. (1 minute.)
4. Member #4 reports to the large group: "One thing we did well today was..." (Avoid the words "cooperate" and "work together;" be specific.)

PROBLEMS AND INTERVENTIONS

OBSERVED PROBLEMS: Some students have difficulty encouraging or praising other group members.

POSSIBLE INTERVENTIONS: Prior to assigning the task, discuss in large group ways to encourage and praise. Write specific suggestions on chalkboard but erase during activity.

ACTUAL INTERVENTIONS: The teacher can effectively model these behaviors as he/she monitors group behaviors.

LESSON EVALUATION

TASK ACHIEVEMENT: All groups successfully completed the task within the 50-minute period.

SUGGESTIONS FOR NEXT TIME: Use topical columns from current newspaper.

INDIVIDUAL CHECKLIST

NAME____

GROUP__________________

Check off what you did in your group today.

___ 1. I played my role.

___ 2. I helped someone in the group by showing them evidence from the article.

___ 3. I asked someone their opinion.

___ 4. I helped keep the group working.

___ 5. I said something positive to a member of our group.

___ 6. I asked someone to prove their answer.

___ 7. I contributed my ideas.

"BEING BULLISH ON BUYING AMERICAN"

By Art Buchwald
Los Angeles Times
February 9, 1982

"There is only one way the country is going to get on its feet," said Baleful.

"How's that?" I asked as we drank coffee in his office at the Baleful Refrigerator Company.

"The consumer has to start buying American," he said, slamming his fist down on the desk. "Every time an American buys a foreign refrigerator it costs one of my people his job. And every time one of my people is out of work, it means he or she can't buy refrigerators."

"It's a vicious circle," I said.

Baleful's secretary came in. "Mr. Thompson, the steel broker, is on the phone."

My friend grabbed the receiver. "Thompson, where is that steel shipment from Japan that was supposed to be in last weekend?...I don't care about the weather! We're almost out of steel, and I'll have to close down the refrigerator assembly line next week. If you can't deliver when you promise, I'll find myself another broker."

"You get your steel from Japan?" I asked Baleful.

"Even with shipping costs, their price is still lower than steel made in Europe. We used to get all our sheets from Belgium, but the Japanese are now giving them a run for their money."

The buzzer on the phone alerted Baleful. He listened for a few moments and then said, "Excuse me, I have a call from Taiwan. Mark Four? Look, R & D designed a new push-button door handle and we're going to send the specs to you. Tell Mr. Chow if his people send us a sample of one and he can make it for us at the same price as the old handle, we'll give his company the order."

A man came in with a plastic container and said, "Mr. Baleful, you said you wanted to see one of these before we ordered them. They are the containers for the ice maker in the refrigerator."

Baleful inspected it carefully and banged it on the floor a couple of times. "What's the price on it?"

"Hong Kong can deliver at $2 a tray, and Dong-Fu Plastics in South Korea said they can make it for $1.70."

"It's just a plastic tray. Take the South Korea bid. We'll let Hong Kong supply us with the shelves for the freezer. Any word on the motors?"

"There's a German company in Brazil that just came out with a new motor, and it's passed all our tests, so Johnson has ordered 50,000."

"Call Cleveland Motors and tell them we're sorry but the price they quoted us was just too high."

continued

"Yes, sir," the man said and departed.

The secretary came in again and said, "Harry telephoned and wanted to let you know the defrosters just arrived from Finland. They're unloading the box cars now."

"Good. Any word on the wooden crates from Singapore?"

"They're at the dock in Hoboken."

"Thank heaven. Cancel our order from Boise Cascade."

"What excuse should I give them?"

"Tell them we made a mistake in our inventory or we're switching to plastic. I don't care what you tell them."

Baleful turned to me. "Where were we?"

"You were saying that if the consumer doesn't start buying American, this country is going to be in a lot of trouble."

"Right. It's not only his patriotic duty, but his livelihood that's at stake. I'm going to Washington next week to tell the Senate Commerce Committee if they don't get on the stick, there isn't going to be a domestic refrigerator left in this country. We're not going to stay in business for our health."

"Pour it on them," I urged him.

Baleful said, "Come out with me into the showroom."

I followed him. He went to his latest model, and opened the door. "This is an American refrigerator made by the American worker, for the American consumer. What do you have to say to that?"

"It's beautiful," I said. "It puts the foreign imports to shame."

QUESTIONS ON "BEING BULLISH BY BUYING AMERICAN"

1. What does Mr. Baleful suggest is the only way for America to "get on its feet?"

2. What is the vicious circle he is talking about regarding buying and selling refrigerators?

3. What is the source of steel used by the Baleful Refrigerator Company?

4. From what country did it previously get its steel sheets? Why did the company switch suppliers?

5. What continent is the major source of refrigerator parts? Can you guess why?

6. Do you agree with Baleful's statement above that "This is an American refrigerator made by the American worker, for the American consumer?" Why or why not?

7. Write three statements that could express the main idea of this article. Then pick the best one. Justify with examples from the article.

THE 1920'S

Robert L. Weldon
Twin Peaks Middle School
Poway Unified School District
Poway, CA

GRADE LEVEL: 7-10 SUBJECT: Social Studies/History

GROUP SIZE: 4 members per group.

ASSIGNMENT TO GROUPS: One student is an above average achiever, one student is from the Resource Specialist Program, and two students are average achievers. This is the most effective arrangement to accomplish this Cooperative Learning strategy.

ROOM ARRANGEMENT: There will be two classroom arrangements. First the students will be sitting in their groups when they receive their assignment and discuss which members will take which responsibility towards completing the group product. This will hold true when they meet back in their individual groups after meeting in their expert groups. Second, students will be arranged into expert groups so that they may compare answers to the section of the product they are responsible for completing. After doing this, they return to their small groups to put everything together to complete the final product.

MATERIALS NEEDED: Student textbooks (*American History*, Harcourt, Brace, Jovanovich, Inc.), expert question sheets over the information presented in their books and a quiz sheet over the chapter. Questions for the expert sheets are taken from their textbooks.

SETTING THE LESSON

TASK STATEMENT:

1. Students will learn about the League of Nations and why President Wilson was unable to get the approval of Congress for the League.
2. Students will be exposed to domestic life during the 1920's, the age of jazz, prohibition, Women's Rights, crime, the "Golden Age" of sports and entertainment, the stock market, speculation and the great stock market crash.
3. Students will be exposed to foreign policy of the 1920's and the U.S.'s role in world affairs after World War I.
4. Students will be exposed to and learn how to complete a line graph.

GROUP GOAL: We will work cooperatively with each other to complete the jigsaw given to you. That means:

- I want one packet and quiz sheet from each group.
- Every group member must indicate that they agree with the group's answers and understands the material by signing the group's paper.
- Make sure all group members have their say.
- Help each other to understand the material.
- Act positively towards each other rather than negatively in completing your task.

CRITERIA FOR SUCCESS: Guide for evaluating the packet:

1. Are all the questions answered correctly on the packet and are they written neatly?
2. Have the quiz sheets been filled out completely and are they neat?
3. Have the students from each group signed their group packet and quiz sheet?

SPECIFIC BEHAVIORS EXPECTED: All group members must have their say, each member should help the others to understand the material, and each person must act positively towards the other group members.

THE LESSON

MANAGEMENT SUGGESTION: The day before we do a jigsaw, I pass out expert sheets to each group and explain to the students that they need to choose among them who wants to be the expert for each of the sheets while at the same time making sure the resource specialist program student received a particular expert sheet since they have a different textbook than the one used in the regular social studies program. I ask the students to take the expert sheet home and answer the questions so that they are ready for their expert groups the next day. I also give them a general synopsis of the area of history they will be working on.

PROCEDURE: The next day, they come in prepared to get in their expert groups to compare their answers. After an adequate amount of time they have to go back to their Cooperative Learning group. When there, they are asked to each read the question and then read the answer to that question to the rest of their group. The other members of the group are instructed to listen and write down what the expert member of their group is saying to them about a part of the final product. When they finish their packet of information, a member of the group comes to me for a quiz sheet (usually a chapter worksheet). The members of the groups are asked to work together to complete the quiz sheet. The jigsaw is completed by the end of the second hour by each group turning in one packer and one quiz sheet. On this packer and quiz sheet they are to sign their names to show they agree with the answers. Their grade is based upon the score they receive on these sheets.

I tell my students that they have to work together to complete the assignment in the amount of the time given and that in order for it to be complete all of the parts of the assignment must be done. In order to get it done they must work with each other and help rather than "cut down" each other.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Evidence of the expected behaviors will come from an observation form passed out to all students in each cooperative learning group and by teacher observation of students in action.

OBSERVER(S): I monitor the groups by continually walking around the room listening and observing each group in action. I observe each group to see that they are cooperating with each other and that they are on task.

OBSERVATION FORMAT: An observation form will be handed out to each student within each group. There are three categories on the form . Each student will rate each category from one to three with one being low (unsatisfactory) and three being high (excellent). Refer to the example of the form below:

JIGSAW OBSERVATION FORM:

Mr. Weldon
Twin Peaks

Student Name ______________________________ Group ____________

Please rate between one and three with three being the highest how you felt your group performed in the areas below. 3=excellent 2=satisfactory 1=unsatisfactory

	AREA	RATE
1.	How well did each of the members of your group have their say?	________
2.	How much help did the members of the group give to each other?	________
3.	How positive do you feel the people in your group were towards each other?	________

PLANS FOR PROCESSING: After students fill out their observation forms they are asked to hand them in to the teacher. This will give the teacher an opportunity to scan the observation forms noting any obvious strengths or weaknesses in social skills among the groups. The teacher may then give instruction to the class to help solve weaknesses in social skills and praise groups for their strengths. The teacher should stress that students should remain positive in their use of constructive criticism towards other members of their group. Then the teacher will hand back the observation forms to the groups and allow the students to explain their observations to the rest of their group.

PROBLEM AND INTERVENTIONS

POSSIBLE PROBLEMS AND INTERVENTIONS: In order to save time and space I will list each possible problem with its intervention below.

PROBLEM 1: A student not doing their homework in preparation for the Jigsaw.

INTERVENTION: To penalize the group one grade so they would place pressure on the one individual to get their assignment completed. Also to penalize the student an extra grade to remind them the work needs to be completed and not let their group down.

PROBLEM 2: Students passing their papers to each other within the group to quietly copy rather than each expert sharing their answers orally to their cooperative learning group.

INTERVENTION: To go over to the group and remind them they must communicate orally the answers to their expert sheets rather than switching papers and writing quietly.

PROBLEM 3: A group not accepting an R.S.P. student or a particular student in their cooperative learning group.

INTERVENTION: I would place the problem back upon the group. The group would have to figure out a way to cooperate with each other to attain the final product needed. Only in severe cases would any group changes be made.

PROBLEM 4: A student absent during a Jigsaw.

INTERVENTION: To remind the group that one of them needs to attend the absent student's expert group meeting to get the information for their group. If there were only two people left in a group, because of absence, I would try to move them into other cooperative groups for the day.

PROBLEM 5: A student absent when expert sheets were passed out but in attendance when the Jigsaw is done.

INTERVENTION: To give that student a blank copy of an expert sheet needed by their group and having them attend the expert group meeting. They could participate within their group as if they had never been absent the day before.

ACTUAL PROBLEMS AND INTERVENTIONS (during lesson):

All of the above problems and interventions were used during this lesson.

EVALUATING OUTCOMES

ACADEMIC TASK ACHIEVEMENT: All groups finished their tasks in the allotted time given. Even though some groups were at a disadvantage, one way or another they cooperated well enough to complete the task.

GROUP FUNCTIONING: All groups functioned well and stayed on task 98% or more of the time. One group, the one with one student who did not do his homework, bickered a lot and alienated the student. That student ended up doing the whole chapter by himself the next night.

NOTES ON INDIVIDUALS: Student X is having a difficult time adjusting to his group. He did not do his homework and is continually forgetting things for class. I will need to place him on daily progress sheets after talking with his parents. Maybe this will have him ready for the next Jigsaw and therefore he could experience some positive rather than negative feedback from his group.

Student Y is showing a pattern of being absent on the day when expert sheets are given to students but in attendance when the Jigsaw is in actual operation. I might have to take that student aside and tell him that if he is absent the next time expert sheets are given out, that he will have to complete the whole chapter on his own instead of participating in the Jigsaw.

SUGGESTIONS FOR NEXT TIME: Allow more time for observation feedback from teacher to class and between individuals within groups.

HISTORY Ch. 24
EXPERT SHEET #1,
pp. 707 - 718

Mr. Weldon
Twin Peaks

NAME ______________________ SECTION __________ GROUP __________

1. What problem did the 1918 Congressional elections create for President Wilson?

2. What position did the President take on changes in the Versailles Treaty?

3. Who were the mild reservationists? The strong reservationists? The irreconcilables?

4. What was the most important Lodge Reservation?

5. What was the tragedy of Woodrow Wilson?

6. What was the outcome of the final vote on the treaty?

7. What position did Governor Cox take on the League in the 1920 election? What position did Senator Harding take?

8. Why was the voter turnout so large in 1920?

9. How were American Presidents in the 1920s divided betweeen isolationism and internationalism?

10. What effect did peacetime have on industry?

11. What was the Big Red Scare?

12. What was the origin of jazz? How did jazz reflect the 1920s?

13. What were "new women" of the 1920s seeking?

QUIZ SHEET

CHAPTER 24
THE 1920S

Completion (20 points)
Write the term from the list below that best completes each sentence.

Big Red Scare
Elk Hills
Emergency Quota Act
Farm Bloc
Five-Power Naval Treaty
Great Stock Market Crash
Jazz Age
Lodge Reservations
Nineteenth Amedment
Open Door

1. During the ______________________________ after the war, communists were blamed for troubled times.
2. The ______________________________ oil reserve in California was leased for a very low rent in a scandal during Harding's administration.
3. The policy known as the ______________________________ allowed equal trade with China.
4. In 1921 the ______________________________ was organized to support laws favorable to agriculture.
5. Beginning in October 1929, the ______________________________ meant the prosperity of the 1920s was over.
6. Signers of the ______________________________ agreed to build no battleships for ten years.
7. The ______________________________ to the Versailles Treaty were Senator Henry Cabot Lodge's proposed changes.
8. Because the ______________________________ now allowed women suffrage, there was a large voter turnout in 1920.
9. The ______________________________ placed limits by nationality on the number of immigrants into America.
10. The 1920s was known as the ______________________________ .

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Vocabulary (20 points)
Locate each word on the page in your book indicated in parentheses and use vocabulary clues (see page 101) to determine its meaning. Then match the definition in the second column with the word in the first column by writing the correct letter in the space provided.

__________ 11. Disarmament (711)
__________ 12. Blues (717)
__________ 13. Reds (713)
__________ 14. Flappers (718)
__________ 15. Bloviating(710)

a. Women of the 1920s who adopted new styles and ideas.
b. Political party advocating strict isolationism.
c. Limiting manufacture of weapons of war.
d. Popular name for communists.
e. Sounding intelligent but making little sense.
f. Music reflecting experiences of American blacks.

Identification (20 points)
Match the name in the first column with its description in the second column by writing the correct letter in the space provided.

__________ 16. Al Jolson
__________ 17. John W. Davis
__________ 18. Walt Disney
__________ 19. Alfred E. Smith
__________ 20. Albert Fall

a. Governor of New York defeated by Hoover in the 1920 election.
b. Maker of the first sound cartoon, *Steamboat Willie.*
d. Harding's Secretary of the Interior who was involved in oil-leasing scandals.
d. Actor who starred in the first sound motion picture.
e. Democratic Presidential candidate in 1924.

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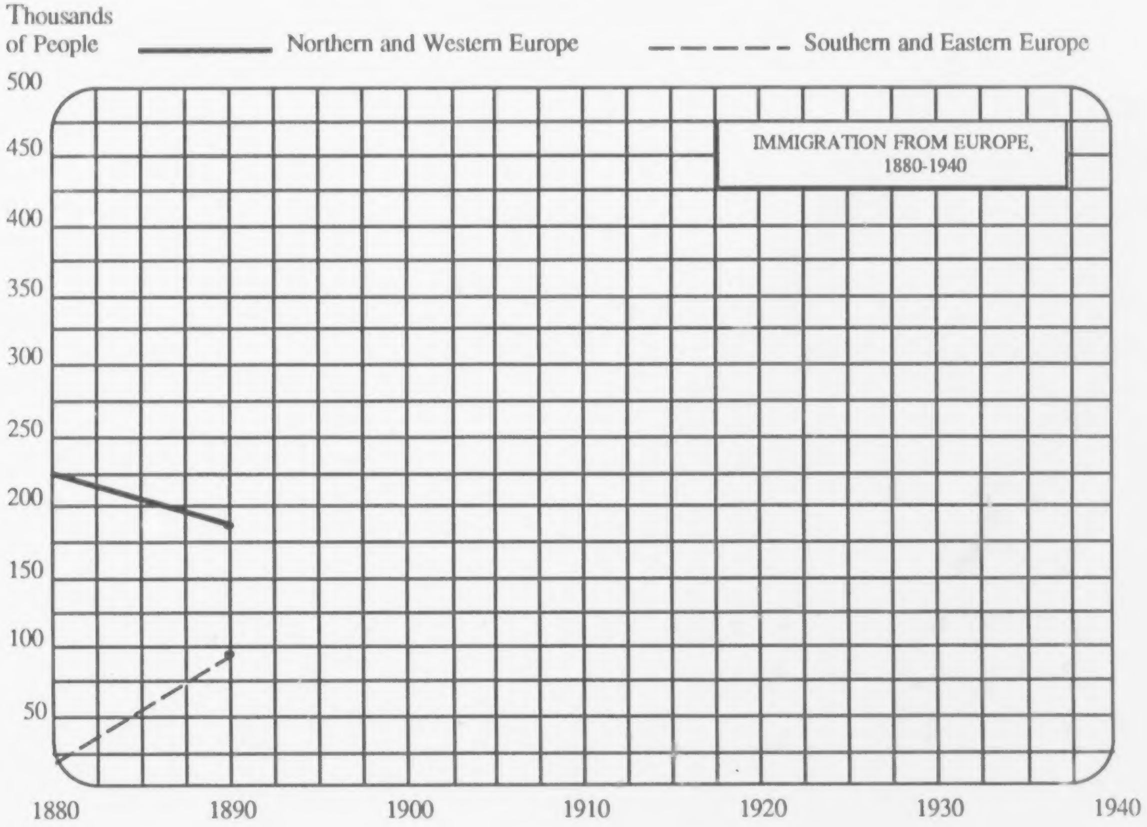
Graph Reading (40 points)
Study the graph on page 716 of your book. Then circle the number in each pair below to show the approximate number, in thousands, of the immigrants from each part of Europe from 1880 to 1940. Transfer this information, which came from a *bar graph*, to the *line graph* below. Examining the line graph on page 268 of your book will be helpful. The years 1880-1890 have been done for you.

	1880	1890	1900	1910	1920	1930	1940
Northern and	225	185	95	180	95	75	15
Western Europe	215	190	85	165	85	65	25
Southern and	15	90	205	480	140	30	15
Eastern Europe	5	80	215	470	145	25	5



Bonus Essay
Use an almanac for assistance in writing a short essay on one athlete or team that played in the Golden Age of Sports.

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Cooperative Learning Lesson Plans

Miscellaneous

SANTA CLAUS

Soni Hale
George Air Force Base Elementary
Adelanto Elementary School District
Adelanto, CA

GRADE LEVEL: Primary SUBJECT: Art

GROUP SIZE: Four students

ASSIGNMENT TO GROUPS: Teacher selection. This particular activity is non-academic. Therefore, the teacher may want to assign students to groups according to social and developmental skills if the grouping is done only for this lesson and/or other art lessons.

ROOM ARRANGEMENT: Groups at tables and desks arranged in fours. Be sure groups have ample working space either on table tops or floor. The entire class is together for instructions and at the end of the activity for Processing. An area of the room is needed for an "Expert group" (if necessary) to teach students how to braid.

MATERIALS NEEDED: Enough materials are needed for all students to complete one project:

- 18 x 24 in. white construction paper.
- Red, green, and white yarn.
- Green construction paper with holly pattern.
- Red construction paper with face/hat patterns.
- Cotton.
- Blue and black construction paper scraps for eyes.
- Scissors.
- Paste.

SETTING THE LESSON

TASK STATEMENT: "Each of you will make a Santa Claus like this model. Each group member will make part of the Santa, then each of you will glue these parts together to make your own Santa Claus."

GROUP GOAL: Jigsaw roles and materials so that each member has a job and must make enough parts for all members. Each person will have a completed Santa Claus, but no one is finished until everyone is finished.

CRITERIA FOR SUCCESS: Each group member has a completed Santa Claus.

SPECIFIC BEHAVIORS EXPECTED: Entire class sits together on rug and discusses what Sharing and Being Polite "looks like" and "sounds like." Some students role-play behaviors acting out both being polite and not being polite. I record student ideas on charts which are displayed during the lesson.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Prepare one packet of materials for each group. Cut out pattern pieces in advance.
2. Review specific behaviors expected.
3. Demonstrate how to make each part of the Santa Claus and how to assemble pieces.
4. Display finished product.
5. Assign to groups. Teacher may or may not assign job roles to each group member.

PROCEDURE: "Each person in your group will have a job - one person will cut all the holly for all four people, one person will braid four hangars, one person will cut out all the face parts, and one person will prepare the cotton and cut out the hat parts. Each person must cut out enough parts, or braid enough hangars so that everyone in the group will have all the parts to put together his/her own Santa. Once each person has finished the jobs, then you may put together your own Santa. However, you will only be given paste when you show me that everyone has the parts on the white construction paper and is ready to paste. So, if you are finished you will have to help others in your group to finish. When all the Santas in your group are finished and have been hung up, then your group must clean up your area."

MONITORING AND PROCESSING

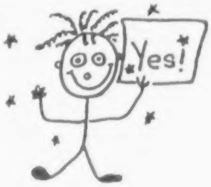
EVIDENCE OF EXPECTED BEHAVIORS:

- Sharing - each member completes job then distributes parts to others; checks to see that all members have materials.
- Polite - polite and soft voices; smiles; passing, not grabbing.
- Expect members to help others if they have finished their own jobs or Santa.

PLANS FOR PROCESSING: Entire class sits on rug. Teacher identifies some examples of social skills which were observed. Students take turns telling of how they felt their group worked together. Share the processing sheets.

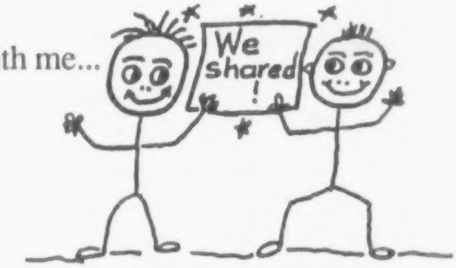
Group Name:______________________ Your Name: ______________

I shared with my group...



I know I shared because I ______________________

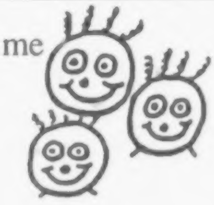
Others in my group shared with me...



I was polite to others...

An example of how I was polite is ______________________

Others in my group were polite to me



Next time I will be better at ______________________

OBSERVER: Teacher.

OBSERVATION FORMAT:

Santa Claus Observation Sheet		
	Sharing	Polite
1.	members do jobs-distribute: check all members materials: help others:	soft voices: smiling: passing: please/thank-you, etc:
2.	members do jobs-distribute: check all members materials: help others:	soft voices: smiling: passing: please/thank-you, etc:
3.	members do jobs-distribute: check all members materials: help others:	soft voices: smiling: passing: please/thank-you, etc:

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Members deciding on who will do which job; making enough parts for all members (not counting accurately); storing and distributing materials.

OBSERVED PROBLEMS: Not enough time; too much for one person to cut all the holly; students not knowing how to braid.

POSSIBLE INTERVENTIONS: Teacher assignment of jobs, monitoring and checking to see that enough parts are being made.

ACTUAL INTERVENTIONS: Form "Expert groups" to teach braiding and/or for all "holly cutters" to work together then return to their groups; divide lesson into two parts - one to prepare materials, one to put together the project; suggest that if a member has finished his/her job that he/she help others to finish.

LESSON EVALUATION

TASK ACHIEVEMENT: All group members completed the task. However, this project seemed to require more intervention than usual.

GROUP FUNCTIONING: Some groups had some difficulty possibly because by making their own projects they were not as concerned about the others in their group.

NOTES ON INDIVIDUALS: I observed four individuals who could not seem to understand that they were not finished until everyone in the group was finished. These individuals also wanted to leave the group and come to me with problems rather than solving them with the group.

SUGGESTIONS FOR NEXT TIME: This project definitely needs to be divided into two class periods. I would also suggest that students be taught to braid before the project begins. If you have to sit with seven students to teach tehm to braid, then the monitoring is not done properly and some of the groups begin to "fall apart."

ROSES ARE RED

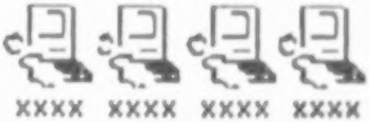
Barbara L. Nelson
Pupil Services Department
La Mesa-Spring Valley School Distict
La Mesa, CA

GRADE LEVEL: 3rd-4th SUBJECT: Word Processing/Poetry

GROUP SIZE: Four students are the maximum number that can work effectively around a computer.

ASSIGNMENT GROUPS: Students of different ability levels in each group (high, medium, low).

ROOM ARRANGEMENT:



MATERIALS NEEDED:

- Four computers
- Four *Bank Street Writer* program disks
- Worksheets with sample poems

SETTING THE LESSON

TASK STATEMENT:

a. Students will be able to complete the last two lines of a familiar poem with new creative lines to create a four-line poem.

b. Students will be able to boot up and type phrases in the writing (enter text) mode of the *Bank Street Writer Word Processing Program.*

c. The group members will agree on the finished product and be able to identify the rhyming words in the poem.

GROUP GOAL: Students work cooperatively to write a four-line poem and practice entering text in *Bank Street Writer* text mode.

CRITERIA FOR SUCCESS: "When you have decided on the lines to type you all must type your names at the end of the poem showing that you agree that the poem is the way you want it to be and that you know the rhyming words of the poem as well. You will get only one grade for the group on your poem and operation of the word processor."

SPECIFIC BEHAVIORS EXPECTED: Everyone encourages or praises others verbally and listens to each other.

THE LESSON

PROCEDURE:

Explaining the Learning Task - "Can you tell me what a poem is?"

Discussion - "Rhyming lines in a pattern are a type of poem. Today we are going to write a poem like that. We are going to do it differently though because we are going to write our own poems on the computer in our groups. Each group will participate and agree on the final product. You will need to decide who will do each job. You will need a typer, a runner, a reader, and a reporter. The runner will get the worksheets that will have the first two lines of the poem:

Roses are red
Violets are blue-

You will add two more lines to complete the poem. Remember each of you will type your name as an author of the poem. Remember how to boot up your computer. Disk in, turn on the monitor and power switch. Today we are practicing typing in the poem so we will be in the enter text mode. Tomorrow we will edit or correct any mistakes you may have made in typing your poem."

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS:

- One poem from each group.
- Everyone knows the rhyming words and can name them.
- Everyone knows how to boot up and get into the edit text mode.

OBSERVATION FORMAT: None.

OBSERVER(S): Teacher.

PLANS FOR PROCESSING:

1. Teacher Feedback on Social Skills.
   At the end of the lesson, I tell each group some skill I observed being demonstrated, we discuss how we can work on it.

2. Student Processing of Interaction.
   Most of our processing is done informally in discussions. "What good thing did you see in your group today?" "How could we work together better?" I also use the Processing Sheet (attached).

PROBLEMS AND INTERVENTIONS

ACTUAL INTERVENTIONS: Teacher praises good listening and encouraging behavior of students. If problems arise, I remind the students to help each other; i.e., "Who remembers how to get into the writing mode?" or "Can some one tell me a word that rhymes with--?" or "Is everyone participating?" "Remember you need to include everyone in the group."

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: Reporter reads the group's poem. Teacher checks for rhyming words from each group. Teacher checks for ability of student to get into enter text mode and saves student work for tomorrow's lesson. Grade is given to each group.

FAMILY SQUARES GAME

Lura Staffanson
Perris High School
Perris Union High School District
Perris, CA

GRADE LEVEL: 9 to 12 SUBJECT: Home Economics/Team Building

GROUP SIZE: Five students.

ASSIGNMENT TO GROUPS: I like to use random selection or high, middle, low approach.

ROOM ARRANGEMENT: In tables of four and five.

MATERIALS NEEDED: One set of five squares cut in puzzles for each group.

SETTING THE LESSON

TASK STATEMENT: "Since we will be working together in groups to run our nursery playschool, it is important that we learn to cooperate and work well together. In our nursery, we will be relying on each other to accomplish the tasks that our group is responsible for. Today, we are going to play, Family Squares Game. You will each be given a group of squares. Your task is to rearrange the pieces of your puzzles until you have five perfect squares."

GROUP GOAL: To be the first group in the room to put all the pieces of the puzzles together to make five squares.

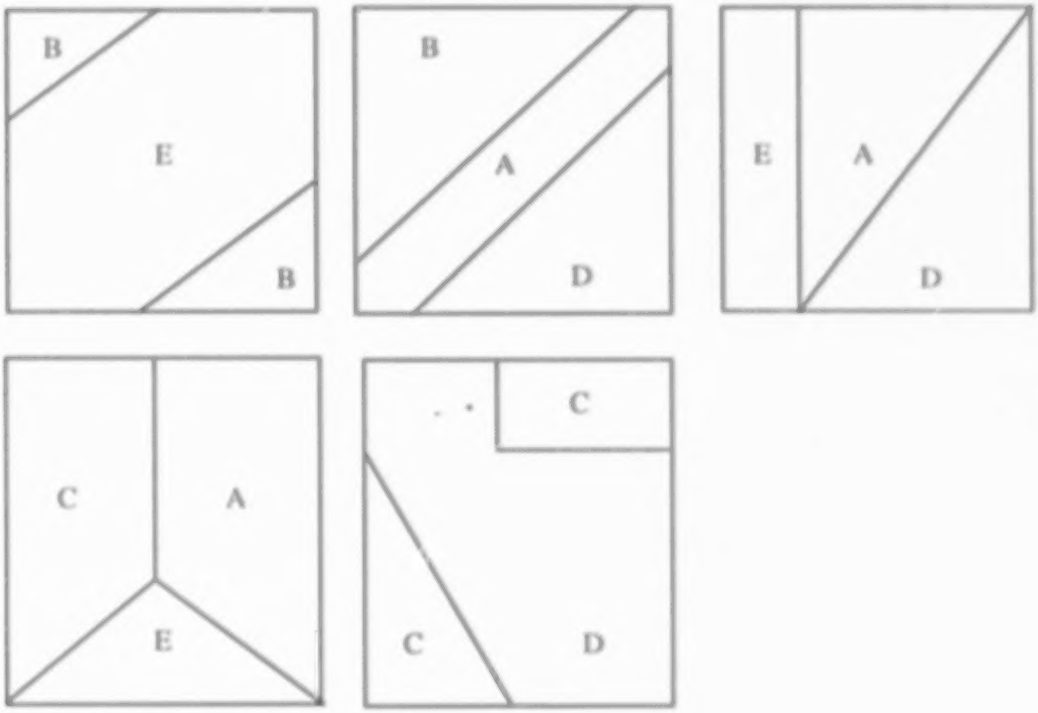
CRITERIA FOR SUCCESS: Five completed squares.

SPECIFIC BEHAVIORS EXPECTED: "You are to work silently with your group members to complete the five squares. You may not signal that you need a puzzle piece, but you may give a puzzle piece that you don't need to a group member.

THE LESSON

NOTE: I find that I really need to work on "team spirit" and "group responsibility" in my classes. Many of my students have a "I don't care if I complete my share of the group assingment or not" attitude. I find that it is necessary to do a lot of "team building" in order to have success in my classes. I find exercizes like this one are helpful in getting the group to "gel".

MANAGEMENT SUGGESTIONS: Make each set of squares the same color. Give each member one pack of pieces A, B, C, D, and E.



PROCEDURE: Explain the following rules to all the groups:*

1. Each of you will receive an envelope with three square puzzles.
2. At the signal, open your envelope and put the pieces in front of you.
3. No member may speak.
4. You may not ask for a card from another member or in any way signal that you want one.
5. You may only give cards to another member that you do not need.

The task is not completed until every member has a perfect square and all are the same size.

* This game was designed by Nancy Bryant, Buena Park High School, Fullerton Joint Union High School District.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: Students will complete all puzzles without talking.

OBSERVATION FORM: Thumbs up or down to signal completion of task.

OBSERVER(S): Teacher monitors all groups by constantly walking around room.

PLANS FOR PROCESSING: Teacher will comment on behaviors observed and ask how they were able to work together to complete this assignment.

PROBLEMS AND INTERVENTIONS

POSSIBLE PROBLEMS: Groups might get discouraged because they can't complete puzzles.

OBSERVED PROBLEMS: Some groups worked very slowly yet completed the squares.

POSSIBLE INTERVENTIONS: If a group feels they can't complete the task, they could ask a resource person from another group to help. This "expert person," however, cannot talk but may only offer silent help.

ACTUAL INTERVENTIONS: I walked constantly around the room, reminding students that talking was not permitted.

LESSON EVALUATION

ACADEMIC TASK ACHIEVEMENT: All classes completed the task.

SUGGESTIONS FOR NEXT TIME: I had student assistants cut out the squares for me. Consequently, some of the squares turned out to be rectangles instead of square shaped. Next time I will run off the pattern first then have the T. A.'s cut the pieces out. I will also make sure to have large envelopes to put pieces in so I don't have to bend any of the puzzles pieces to fit a small letter-size envelope. This was confusing for some students.

OVERVIEW OF COOPERATIVE LEARNING

Michele Britton Bass
Consultant/Teacher Trainer
Santa Barbara, CA

GRADE LEVEL: Adults - teachers, etc.

SUBJECT: Cooperative Learning for teachers with LEP students in class.

GROUP SIZE: Four (three is okay, if not enough for four in each).

ASSIGNMENT TO GROUPS: Ask participants to group themselves with one person who has used cooperative lessons, two who have just tried them some or have heard about Cooperative Learning, and one person who is new to Cooperative Learning.

ROOM ARRANGEMENT: Movable tables and chairs - grouped for four in a group, with group members facing each other.

MATERIALS NEEDED: One packet of four jigsaw pieces per group:

Jigsaw 1:	Competition.
Jigsaw 2:	Rationale for Cooperative Learning.
Jigsaw 3:	Elements of Cooperative Learning.
Jigsaw 4:	Second Language Acquisition and Group Work.

Other materials - Expert group worksheets.

SETTING THE LESSON

TASK STATEMENT: The task is to read individually the jigsaw piece you get (each person in the group will get a different piece). You will then move to an expert group where you meet with others who read the same piece. There you will analyze what you read, answer questions on the worksheet, and prepare to teach this material to your group. The next step is to teach your group members the content from your jigsaw piece. You are also responsible for learning other pieces from group members.

GROUP GOAL: To understand all the information in all four packets in order to use this information in planning Cooperative Learning training for teachers who will use this strategy in classes.

CRITERIA FOR SUCCESS: Teams will be able to generate a plan of what is needed in terms of further training in order to implement Cooperative Learning in class.

Essential elements of a plan include:

- Agreement by all group members.
- Mention of techniques for Cooperative learning.
- Mention of coaching.

SPECIFIC BEHAVIORS EXPECTED: Participants will all contribute to discussion, move to groups when appropriate. Participants will practice the following social skills in groups:

- Task skills clarifying ideas, sharing ideas, asking for opinions.
- Maintenance skills - praising, encouraging.

THE LESSON

MANAGEMENT SUGGESTIONS:

1. Directions are listed on board as well as told verbally.
2. Participants are told to ask group members if they don't understand what they are to do.

PROCEDURE:

1. Pass out a different jigsaw piece to each member of the group. Participants are to read their article silently to themselves.
2. Direct all participants who read Jigsaw 1 to meet together at a designated location; all Jigsaw 2's meet together; Jigsaw 3's together; and Jigsaw 4's together. Each "expert group" is to analyze the article read and answer worksheet questions.
3. Direct each participant to return to the original group and teach the information learned from the particular jigsaw piece to the other members. Each group member is responsible for learning about each jigsaw piece.
4. After the jigsaw pieces have been shared in each group, instruct the groups to develop a plan for additional Cooperative Learning training needed before classroom implementation can be started.

MONITORING AND PROCESSING

EVIDENCE OF EXPECTED BEHAVIORS: All behaviors occur as noted by facilitator (teacher).

OBSERVATION FORMAT: Informal note taking.

OBSERVER(S): Trainer/teacher.

PLANS FOR PROCESSING: Ask participants to share with each other how they felt the structure of the lesson (jigsaw helped them to learn the content. Ask them to share something each group member did that helped them to learn the information.

PROBLEM AND INTERVENTIONS

POSSIBLE PROBLEMS: Participant will be unclear as to directions.

OBSERVED PROBLEMS: None.

ACTUAL INTERVENTIONS: Reminded participants to ask group members first prior to asking teacher about directions.

EVALUATING OUTCOMES

ACADEMIC TASK ACHIEVEMENT: All groups completed task.

GROUP FUNCTIONING: All participants assisted the group to get the task done. Little praising was noticed, until the trainer intervened and reminded the participants in individual groups - then groups initiated some praising and encouraging.

SUGGESTION FOR NEXT TIME: Have a worksheet for the finished product from group, with elements already outlined, so that there is less work for the teacher to remind participants of what constitutes a successful task.

COMPETITION

by

David W. Johnson and Roger T. Johnson

In the traditional competitive classroom the purpose of evaluation is to rank their fellow "best" to "worst." Even if teachers don't use scores and performances in this way, the students tend to rank their fellow students. In most classrooms, fairly stable patterns of achievement exist so that the majority of students always "lose" and a few students always"win." Thus a student may spend twelve years in public schools being confronted daily with the fact that he is a "loser." Although there is no experimental research on the effects of prolonged failure experiences, it seems reasonable to assume that the student's self-attitudes and feelings of competence will be affected. If the student desires to "win," the daily frustration of "losing" may result in a sense of worthlessness, helplessness, and incompetence.

Hurlock (1972) found in an experiment with children that members of a group that was defeated on the first of four days of competition never overcame their initial failure and attained inferior scores for the entire duration of the experiment, even though the groups had been matched on the basis of ability. Tseng (1969) found that as rewards increase in value, so do the tension and frustration of failure; children who failed in competitive situations performed poorly in subsequent competitions. Atkinson (1965) predicts from his theory of achievement motivations that the student who chronically experiences failure will become primarily oriented toward avoiding failure (thus becoming nonachievement oriented). The tendency to avoid failure inhibits the student from attempting a task on which he is to be evaluated, especially when the probability of success is intermediate. Students, however, are forced into achievement-oriented situations. In such a case the student who is dominated by a tendency to avoid failure is likely to choose tasks with a very high or a very low chance of success. Doing so minimizes his anxiety about failure, for if the chance of success is very high, he is almost sure not to fail, and when the chance for success is very low, no one can blame him for failure.

A large number of educators, psychologists, and popular writers have challenged the notion that it is an inevitable part of American education for a large proportion of students to experience failure (Siberman, 1971; Glasser, 1969; Wilhelms, 1970; Kagan, 1965; Holt, 1964; Jackson, 1968; Illich, 1971; Postman and Weingartner, 1969; Kohl, 1969; Nesbitt, 1967; Rogers, 1970; Walberg and Thomas, 1971; Rathbone, 1970). Holt (1969) states that for the student the most interesting thing in the classroom is the other students, but in a competitive goal structure the student must ignore them, act as if these other students, all about him, only a few feet away, are really not there. He cannot interact with them, talk with them, smile at them --- often he cannot even look at them. In many schools he cannot talk to other students in the halls between classes; in many schools he cannot talk to other students during lunch. Holt states that this is splendid training for a world in which, when you are not studying the other person to figure out how to do him in, you pay no attention to him.

One probable and undesirable affective outcome of a pervasive competitive situation is that individuals will try to obstruct each other's goal accomplishment, and they will dislike behaviors that facilitate another person's goal accomplishment. They will have hostile and angry feelings toward individuals who "win," thus relegating them to failure, or will become angry at the teacher, at the school, or at themselves (expressed in such ways as depression, self-punishment, withdrawal, self-destructiveness). Kagan (1965) notes that individuals who are vulnerable to guilt over hostile thoughts and feelings toward others may become anxious when placed in a competitive structure and therefore inhibited in their competitiveness, which reduces their chances for success. Furthermore, students who are sensitive to their peers' rejection may fear the consequences of winning and thus not achieve up to their potential.

Even when a student is one of the few individuals who experiences success most of the time, an emphasis upon competition can have long-term destructive consequences. If a student is continually reinforced and given attention and approval for "winning," he may believe that a person is valued only for his "wins" and not for himself. The result of this belief is a need to prove continually his value through achievement. There is a basic rejection of the student as a person in such a process.

In the review of research, it is possible to note a variety of undesirable cognitive and affective outcomes of competition in comparison with cooperation. Students will be dissatisfied if they are not winning and will dislike any behavior or event that helps another person to win. Ultimately, they will dislike the students who are successful.

Competitive situations are characterized by either the absence of communications or misleading communication, destructive and negative attitudes toward each other, frequent misperceptions about each others behavior, and tendency to define conflicts as "win-lose" situations. In a competitive situation, differences in behavior and background are often perceived as threatening as they may provide others with some advantage in accomplishing the goal. Differences that reduce the chances of others to "win" will be ridiculed and looked down upon. Prejudice and discrimination against minority groups increase and are perpetuated under competitive conditions. There is more apathy toward learning and negative attitudes toward school, teachers, education, and subject areas. Anxiety is often high in competitive situations. Achievement in problem-solving situations will be low. When competition is overused or used inappropriately, the negative cognitive and affective outcomes are staggering and overwhelming. There can be no doubt that the pervasive use of interpersonal competitions leads to dehumanization among students and to the sabotaging of the instructional program.

MYTHS SUPPORTING THE USE OF COMPETITION

Myth 1: Our society is highly competitive and students must be educated to succeed in a "survival of the fittest" world.

A study of social psychology suggests that competition is a very, very small part of interacting with other individuals in our society and probably is not a very important type of human interaction.

Myth 2: Achievement, success, outstanding performance, superhuman effort, the rise of the great leader, drive, ambition, and motivation depend upon competing with others.

Competition is threatening and discouraging to those who believe they cannot win, and many students will withdraw psychologically or physically or only half try in competitive situations.

Myth 3: Competition builds character and toughens the young for life in the real word.

In an eight year study on effects of competition on the personality, Ogilvie and Tutko note that competition does not toughen an individual to face other competitive situations but rather that, under the intense pressure of athletics, personality flaws manifest themselves quickly and prevent successful participation.

WHEN IS INTERPERSONAL COMPETITION DESIRABLE?

Despite the potentially destructive effects of competition, there are conditions under which it may be used profitably by teachers.

First, competition is effective in increasing student performance on a simple drill activity or a speed-related task when sheer quantity of work is desired on a project that requires little or no help from another person. Spelling, vocabulary, math drills, writing practice, work recognition, recall of facts and dates, hand-eye coordination, and athletic contests are examples of such tasks. When the instructional goals are to review, drill or achieve quantity on a simple task, the teacher will wish to use competition.

Second, when competition takes place it often is a source of fun, excitement, and a release of energy. People commonly seek out competition under low-anxiety-producing conditions and enjoy it immediately. Games like Monopoly, poker, checkers, and bridge; sports like tennis, golf, bowling; and such activities as movie, playgoing, and reading provide competitive experience either directly or vicariously. Physical competition in which students have a chance to be boisterous are involving, exciting, and fun, even for spectators. When winning or losing does not create a great deal of anxiety for any of the participants, there seems to be a sense of pleasure in matching one's skills and abilities against those of one's peers. When the task is not a life and death matter, one should expect to enjoy the interaction --- win or lose.

Third, when there are no set criteria by which students can evaluate their skills and abilities, there may be a self-evaluatory drive toward comparing oneself with others to obtain an accurate appraisal of oneself. Sometimes students may wish to compete in order to appraise their skills, make comparative judgments, and learn what they are really capable of doing. But, if comparisons are going to be made, it is important for each student to keep track of how the competition is going.

The fourth condition, therefore, is that each student is able to monitor the progress of his competitors.

Fifth, students will be motivated by the competitive goal structure when they believe that they have a reasonable chance of winning.

Sixth, there must be a clear criteria concerning what is a right or wrong answer.

Finally, competition will run smoothly when clear procedures or arbitrating arguments and determining winners is set up and communicated to the students.

Taken from: Johnson, David W. and Johnson, Roger T., *Learning Together and Alone. Cooperation, Competition, Individualization.* 1975.

RATIONALE FOR COOPERATIVE LEARNING

by

David W. Johnson and Roger T. Johnson

Cooperative Learning is not a new idea -- it is as old as humankind. The capacity to work cooperatively has been a major contributor to the survival of our species. Throughout history, it has been those individuals who could organize and coordinate their efforts to achieve a common purpose that have been most successful in virtually any human endeavor. This is as true of joining with one's fellows to hunt or raise a barn as it is of space exploration.

Certainly, the use of Cooperative Learning and education procedures is not new to American education. There have been periods in which Cooperative Learning had strong advocates and was widely used to promote the educational goals of that time.

One of the most successful advocates of Cooperative Learning was Colonel Francis Parker. In the last three decades of the 19th century, Colonel Parker brought to his advocacy of Cooperative Learning enthusiasm, idealism, practicality, and an intense devotion to freedom, democracy, and individuality in the public schools. His fame and success rested on the vivid and regenerating spirit he brought into the schoolroom and on his power to create a classroom atmosphere that was truly cooperative and democratic. When he was superintendent of the public schools in Quincy, Massachusetts (1875-1880), more than 30,000 visitors a year came to observe his use of Cooperative Learning procedures (Campbell, 1965). Parker's instructional methods of promoting cooperation among students dominated American education through the turn of the century.

Following Parker, John Dewey promoted the use of Cooperative Learning groups as part of his famous project method in instruction. In the late 1930's, however, interpersonal competition began to be emphasized in public schools.

In the 1940's Morton Deutsch, building on the theorizing of Kurt Lewis, proposed a theory of cooperative and competitive situations that has served as the primary foundation on which subsequent research and discussion of Cooperative Learning has been based. Our own work is directly based on the research of Deutsch.

Several groups of researchers and practitioners scattered throughout the United States, Canada, and in several other countries are engaged in the study and implementation of Cooperative Learning environments and procedures. At Johns Hopkins University, the work on Cooperative Learning initiated by David DeVries and Keith Edwards is being extended by Robert Slavin and his colleagues. Elliot Aronson, University of California at Santa Cruz, has developed a "jigsaw" procedure for using curriculum materials in order to encourage Cooperative Learning. Others involved in studying and implementing Cooperative Learning procedures include Shlomo Sharan and Rachael Lazarowitz at Tel-Aviv University, Israel; Spencer Kagan at the University of California, Riverside; Gayle Hughes and her colleagues in the Department of Co-operation, Saskatchewan, Canada; Egil Hjertaker and his colleagues in Bergen, Norway; and many more.

INTERDEPENDENCE AMONG STUDENTS

In every classroom, teachers may structure lessons so that students are in a win-lose struggle to see who is best. They can also allow students to learn on their own, individually, or they can arrange students in pairs or small groups to help each other master the assigned material.

An essential instructional skill that all teachers need is knowing how and when to structure students' learning goals competively, individualistically, and cooperatively. Each goal structure has its place; an effective teacher will use all three appropriately.

Teachers can structure lessons **competitively** so that students work against each other to achieve a goal that only one or a few students can attain. Students are graded on a curve, which requires them to work faster and more accurately than their peers. In such competitive situations there is a negative interdependence among goal achievements; students perceive that they can obtain their goals if and only if the other students in the class fail to obtain their goals (Deutsch, 1962; Johnson and Johnson, 1975). Thus, a student seeks an outcome that is personally beneficial but is detrimental to others with whom he or she is competitively linked. Unfortunately, most students perceive school as predominantly a competitive enterprise. They either constantly work hard in school to do better than the other students, or they take it easy because they do not believe they have a chance to win.

Teachers can structure lessons **individualistically** so that students work by themselves to accomplish learning goals unrelated to those of the other students. Individual goals are assigned each day, students' efforts are evaluated on a fixed set of standards, and rewards are given accordingly. Each student has a set of materials and works at his or her own speed, ignoring the progress of other students in the class. In individualistic learning situations, students' goal achievements are independent; students perceive that the achievement of their learning goals is unrelated to what other students do (Deutsch, 1962; Johnson and Johnson, 1975). Whether a student accomplishes his or her goal has no influence on whether other students achieve their goals in an individualistic learning situation. Thus, a student seeks an outcome that is personally beneficial and ignores as irrelevant the goal achievement of other students.

For the past half century, competitive and individualistic goal structures have dominated American education. Students usually come to school with competitive expectations and pressures from their parents. Many teachers have tried to reduce classroom competition by switching from norm-referenced to a criteria-referenced evaluation system. In both competitive and individualistic learning situations, teachers try to keep students away from each other.

There is a third option. Teachers can structure lessons **cooperatively** so that students work together to accomplish shared goals. Students are assigned to small groups and instructed to learn the assigned material and to make sure that the other members of the group learn the assigned material. Individual accountability can be checked randomly by selecting a paper from each group to grade. A criteria-referenced evaluation system is use. In Cooperative Learning situations there is a positive interdependence among students' goal attainment: students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals (Deutsch, 1962; Johnson and Johnson, 197 5). Thus, students seek outcomes that are beneficial to all those with whom they are cooperatively linked. Students discuss the material with each other, help one another understand it, and encourage each other to work hard. Yet if cooperative relationships are the only way students interact in school, they may never learn to compete appropriately for fun or have the opportunity to follow a learning trail of their own.

BACK TO THE BASICS

The importance of Cooperative Learning goes beyond maximizing outcomes such as achievement, positive attitudes toward subject areas and the ability to think critically, although these are worthwhile outcomes. Cooperation is as basic to humans as the air we breathe. The ability of all students to work collaboratively with others is the keystone to building and maintaining marriages, families, career, friendships, and communities. Knowledge and skills are of no use if the student cannot apply them in cooperative interaction with other people. Being able to perform technical skills such as reading, speaking, listening, writing, computing, and problem-solving are valuable but of little use if the person cannot apply those skills in cooperative interaction with other people in career, family, and community settings. It does no good to train an engineer, secretary, accountant, teacher, or mechanic if the person does not have the cooperative relationships on the job, in the family and community, and with friends. Schools have been places that have promoted unrealistic expectations of what career, family and community life may be like. Most careers do not expect people to sit in rows and compete with colleagues without interacting with them. Teamwork, communication, effective coordination, and divisions of labor characterize most real-life settings. It is time for schools to more realistically reflect the reality of adult life. The most logical way to ensure that students master the cooperative skills required in most task-oriented situations is to structure the majority of learned technical knowledge and skills in a realistic setting of having to work cooperatively with their classmates. The success we have had in training teachers to use Cooperative Learning procedures is evidence that schools can in fact become realistic socializing and training organizations for our society. There is cooperative interaction with other people.

Taken from: Johnson, David W. and Johnson, Roger T., *Learning Together and Alone. Cooperation, Campetition, Individualization.* 1975.

THE BASIC ELEMENTS OF COOPERATIVE LEARNING

by

David W. Johnson and Roger T. Johnson

What precisely is this mode of learning so many people are interested in pursuing? It sounds simple enough, true, but many practitioners who believe that they are using Cooperative Learning are, in fact, missing its essence. There is a crucial difference between putting students into groups to learn and in structuring cooperative interdependence among students.

Cooperation is **not** having students sit side-by-side at the same table to talk with each other as they do their individual assignments.

Cooperation is **not** assigning a report to a group of students wherein one student does all the work and the others put their names on the product as well.

Cooperation is much more than being physically near other students, discussing material with other students, helping other students or sharing materials among students, although each of these is important in Cooperative Learning. Here's what Cooperative Learning is, as we see it.

There are four basic elements that must be included for small group learning to be truly cooperative.

The first is **positive interdependence**. This may be achieved through mutual goals (goal interdependence); divisions of labor (task interdependence); dividing materials, resources or information among group members (resource interdependence); and by giving joint rewards (reward interdependence). In order for a learning situation to be cooperative, students must perceive that they are positively interdependent with other members of their learning group.

Second, Cooperative Learning requires **face-to-face** interaction among students. There is no magic in positive interdependence in and of itself. It is the interaction patterns and verbal interchange among students promoted by the positive interdependence that affect education outcomes.

The third basic element of Cooperative Learning is **individual accountability** for mastering the assigned material. The purpose of a learning situation is to maximize the achievement of each individual student. Determining the level of mastery of each student is necessary so students can provide appropriate support and assistance to one another.

Finally, Cooperative Learning requires that students appropriately use **interpersonal and small-group skills**. Obviously, placing socially unskilled students in a learning group and telling them to cooperate will not be successful. Students must be taught the social skills needed for collaboration and they must be motivated to use them. Students must also be given the time and procedures for analyzing how well their learning groups are functioning and the extent to which students are employing their social skills to help all group members to achieve and to maintain effective working relationships within the group.

There are a number of differences between the typical use of classroom learning groups and Cooperative Learning groups. These differences are:

1. Cooperative Learning groups are based on positive interdependence among group members, where goals are structured so that students need to be concerned about performance of all group members as well as their own.

2. In Cooperative Learning groups, there is a clear **individual accountability** where every student's mastery of the assigned material is assessed, each student is given feedback on his or her progress, and the group is given feedback on how each member is progressing so that the other group's members know who to help and encourage. In traditional learning groups, individual students are not often held individually accountable for providing their share of the group's work and, occasionally, students will "hitchhike" on the work of others.

3. In Cooperative Learning groups, the membership is typically heterogeneous in ability and personal characteristics, while traditional learning groups are often homogeneous in membership.

4. In Cooperative Learning groups, all members share responsibility for performing leadership actions in the group. In traditional learning groups, a leader is often appointed and put in charge of the group.

5. In Cooperative Learning groups, responsibility for each other's learning is shared. Group members are expected to provide help and encouragement to each other in order to ensure that all members do the assigned work. In traditional learning groups, members are seldom held responsible for each other's learning.

6. In Cooperative Learning groups, the goals focus on bringing each member's learning to the maximum **and** on maintaining good working relationships among members. In traditional classroom learning groups, students most often focus only on completing the assignment.

7. In Cooperative Learning groups, the social skills students need in order to work collaboratively (such as leadership, ability to communicate, to trust one another, and to mangage conflict) are directly taught. In traditional classroom learning groups, interpersonal and small-group skills are assumed--most often mistakenly.

8. When Cooperative Learning groups are used, the teacher observes groups, analyzes the problems they have working together, and gives feedback to each group on how well they are managing the group task. Teacher observation and intervention seldom take place in traditional learning groups.

9. In Cooperative Learning, the teacher structures procedures for groups to "process" how effectively they are working, while no attention is given, in traditional group learning situations, to the way the group is working -- or not working.

WHAT IS THE DIFFERENCE?

Cooperative Learning Groups	Traditional Learning Groups
Positive interdependence	No interdependence
Individual accountability	No individual accountability
Heterogeneous	Homogeneous
Shared leadership	One appointed leader
Shared responsibility for each other	Responsibilitiy only for self
Task and maintenance emphasized	Only task emphasized
Social skills directly taught	Social skills assumed and ignored
Teacher observes and intervenes	Teacher ignores group functioning
Groups process their effectiveness	No group processing

Taken from: Johnson, David W. and Johnson, Roger T., *Cooperation in the Classroom.* 1984.

SECOND LANGUAGE ACQUISITION AND GROUP WORK

by

Michael H. Long and Patricia A. Porter

There are at least five pedagogical arguments for the use of group work in second language (SL) learning. They concern the potential of group work for increasing the quantity of language practice opportunities, for improving the quality of student talk, for individualizing instruction, for creating a positive affective climate in the classroom, and for increasing student motivation. This is a brief review of those arguments.

Argument 1: Group work increases language practice opportunities.

In all probability, one of the main reasons for low achievement by many classroom SL learners is simply that they do not have enough time to practice the new language. This is especially serious in large EFL classes in which students need to develop aural-oral skills, but it is also relevant to the ESL context.

From observational studies of classrooms (e.g., Hoetker and Ahlbrand, 1969; Fanselow, 1977), we know that the predominant mode of instruction is what might be termed the "lockstep," in which one person (the teacher) sets the same instructional pace and content for everyone, by lecturing, explaining a grammar point, leading drill work, or asking questions of the whole class. The same studies show that when lessons are organized in this manner, a typical teacher of any subject talks for at least half, and often for as much as two thirds, of any class period (Flanders, 1970). In a 50-minute lesson, that would leave 25 minutes for students. However, since five minutes is usually spent on administrative matters (getting pupils in and out of the room, calling the roll, collecting and distributing homework assignments, and so on) and five minutes on reading and writing, the total time available to students is actually more like 15 minutes. In an EFL class of 30 students in a public secondary school classroom, this averages out to 30 seconds per student per lesson -- or just **one hour per student per year**.

Group work cannot solve this problem entirely, but it can certainly help. To illustrate with the public school setting, suppose that just **half** the time available for individual student talk is devoted to work in groups of three instead of to lockstep practice, in which one student talks while 29 listen (or not, as the case may be). This will change the total **individual** practice time available to each student from one hour to about five and a half hours. While still too little, this is an increase of over 500 percent.

Argument 2: Group work improves the quality of student talk.

The lockstep limits not only the **quantity** of talk students can engage in, but also its **quality.** This is because teacher-fronted lessons favor a highly conventionalized variety of conversation, one rarely found outside courtrooms, wedding ceremonies, and classrooms. In such settings, one speaker asks a series of know-information, or display, questions, such as "Do you work in the accused's office at 27 Sloan Street?", "Do you take this woman to be your lawful wedded wife?", and "Do you come to class at nine o'clock?" - questions to which there is usually only one correct answer, already known to both parties. The second speaker responds and then, in the classroom, typically has the correctness of the response confirmed. Only rarely does genuine communication take place.

Group work can help a great deal here. First, unlike the lockstep, with its single, distant initiator of talk (the teacher) and its group interlocutor (the students), face-to-face communication in a small group is a natural setting for conversation. Second, two or three students working together for five minutes at a stretch are not limited to producing hurried, isolated "sentences." Rather, they can engage in cohesive and coherent sequences of utterances, thereby developing discourse competence, not just a sentence grammar. Third, as shown by Long, Adams, McLean, and Castanos (1976), students can take on roles and adopt positions which in lockstep work are usually the teacher's exclusive preserve and can thus practice a range of language functions associated with those roles and positions. While solving a problem concerning the siting of a new school in an imaginary town, for example, they can suggest, infer, qualify, hypothesize, generalize, or disagree. In terms of another dimension of conversationa management, they can develope such skills - also normally practiced only by the teacher - as topic nomination, turn-allocation, focusing, summarizing, and clarifying. (Some of these last skills also turn out to have considerable psycholinguistic importance.) Finally, given appropriate materials to work with and problems to solve, student can engage in the kind of information exchange characteristic of communication outside classrooms - with all the creative language use and spontaneity this entails - where all focus is on the meaning as well as form. In other words, they can in all these ways develop at least some of the variety of skills which make up communicative competence in a second language.

Argument 3: Group work helps individualize instruction.

However efficient it may be for some purposes, (for example, the presentation of new information needed by all students in a class), the lockstep rides roughshod over many individual differences inevitably present in a group of students. This is especially true of the vast majority of school children, who are typically placed in classes solely on the basis of chronological and mental age. Some students will have much better comprehension than production skills, and vice versa. Some may speak haltingly but accurately, while other, though fluent, make lots of errors.

In addition to this kind of variability in specific SL abilities, other kinds of individual differences ignored by lockstep teaching include students' age, cognitive state, sex, attitude, motivation, aptitude, personality, interests, cognitive style, cultural background, native language, prior language learning experience, and target language needs. Group work obviously cannot handle all these differences, for some of which we still lack easily administered, reliable measures. Once again, however, it can help. Small groups of students can work on different sets of materials suited to their needs. Moreover, they can do so simultaneously, thereby avoiding the risk of boring the students who do not have the same problem, perhaps because they speak a different first language, or who do have the same problem but need less time to solve it. Group work, then, is a first step toward individualization of instruction.

Argument 4: Group work promotes a positive affective climate.

Many students, especially the shy or linguistically insecure, experience considerable stress when called upon in the public arena of the lockstep classroom. In contrast to the public atmosphere of lockstep instruction, a small group of peers provides a relatively intimate setting, and usually, a more supportive environment in which to try out embryonic SL skills. Freedom from the requirement for accuracy at all costs and entry into the richer and more accommodating set of relationships provided by small-group interaction promote a positive affective climate.

Argument 5: Group work motivates learners.

Several advantages have already been claimed for group work. It allows for a greater quantity and richer variety of language practice, practice that is better adapted to individual needs and conducted in a more positive affective climate. Students are individually involved in lessons more often and at a more personal level. For all these reasons and because of the **variety** group work inevitably introduces into a lesson, it seems reasonable to believe that group work motivates the classroom learner.

Taken from: "Group Work, Interlanguage Talk, and Second Language Acquisition," by Michael H. Long and Patricia A. Porter, June 1985, *TESOL QUARTERLY*. Reprinted by permission.

EXPERT WORKSHEET: Competition

1. List three findings about competition from the research.
    1. ______________________________
    2. ______________________________
    3. ______________________________
2. Describe three outcomes in school behaviors, performance, and attitudes when students are in competitive situations in class.
    1. ______________________________
       ____
    2. ______________________________
       ____
    3. ______________________________
       ____
3. Discuss the myths about competition and the reasons why they are not valid arguments.
4. Give as many examples as possible of appropriate uses for competition in the classroom.

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EXPERT WORKSHEET: Rationale for Cooperative Learning

1. Name three people currently researching and implementing Cooperative Learning across the country or in other countries.

   1. ______________________ from ______________________

   2. ______________________ from ______________________

   3. ______________________ from ______________________

2. List three ways teachers can structure lessons in a classroom.

   1. ____

   2. ____

   3. ____

3. Compare the different student interaction patterns for each of the three goal/lesson structures listed above.

4. Name as many reasons for using Cooperative Learning as your group can generate.

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EXPERT WORKSHEET: Elements of Cooperative Learning

1. Give three examples of situations that are **not** cooperatively structured lessons.

   1. ______________________________

      ____

   2. ______________________________

      ____

   3. ______________________________

      ____

2. List three ways teachers can structure lessons in a classroom.

   1. ______________________________
   2. ______________________________
   3. ______________________________

3. Compare traditional learning groups with Cooperative Learning groups - what are the similarities and differences?

4. Name as many skills as possible that a teacher should have in order to structure and maintain appropriate Cooperative learning groups in the classroom.

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EXPERT WORKSHEET: Second Language Acquisition and Group Work

1. List five arguments in support of group learning for learning a second language.

    1. ______________________________
    ____
    2. ______________________________
    ____
    3. ______________________________
    ____
    4. ______________________________
    ____
    5. ______________________________
    ____

2. What are three differences between the lockstep teaching approach and cooperative group learning?

    1. ______________________________
    ____
    2. ______________________________
    ____
    3. ______________________________
    ____

3. Discuss how group learning can affect all students' language use.

4. List as many applications as are appropriate for cooperative group learning.

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Cooperative Learning Lesson Plans

Appendices

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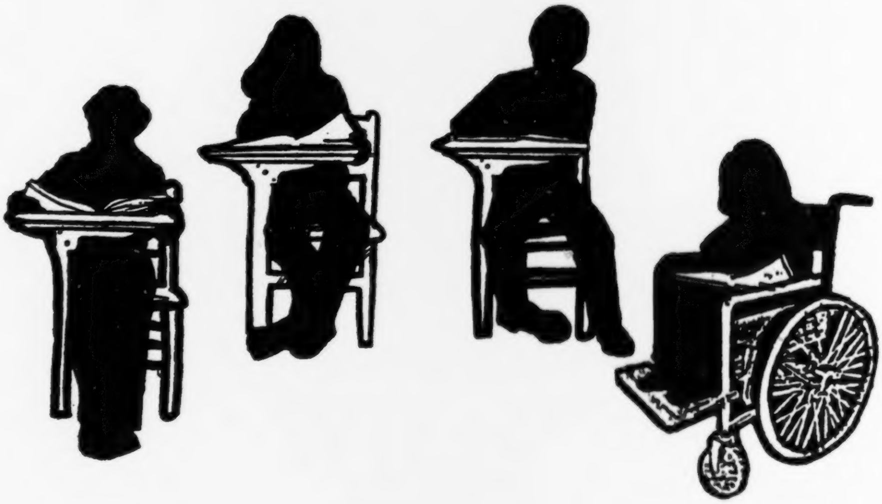

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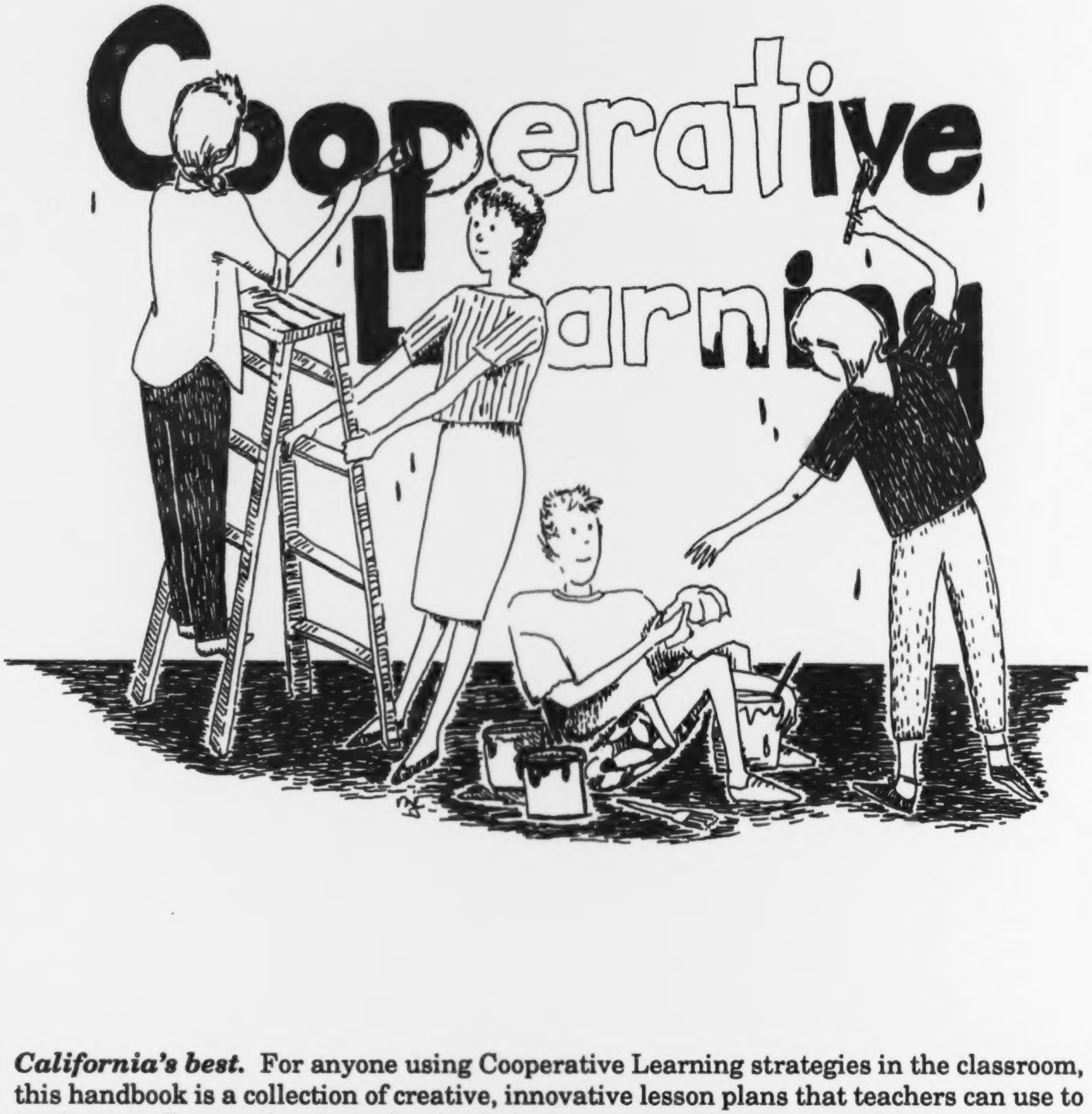
This list of resources was composed in part by Dr. Spencer Kagan, University of California, Riverside.

RiSE

Resources in Special Education
650 University Ave., Room 201
Sacramento, CA 95825
916/921-0521

Publications Available Through Resources in Special Education

Assessment of Chinese Speaking Limited English Proficient Students With Special Needs, by Marion Tinloy, Amy Tan, and Brian Leung, 1987, 330 pp.	$ 25.00
Bilingual and Special Education: Procedural Manual for Program Administrators, 1987, 44 pp.	$ 7.50
Cooperative Activities for the Home by Audray Holm, Denise Schultz, Patricia Winget, and Linda Wurzback, 1987, 60 pp.	$ 4.00
Cooperative Learning Institute, 1985, 108 pp.	$12.50
Educators and Parents Working together to Develop Special Education Parent Support Groups, by Mary Ann Duganne, Marilyn Ferrara, and Tom Justice, 1986, 43 pp.	$ 8.50
Inservice on Inservice, by SERN 7, 1979, 80 pp.	$15.00
Integrating the Core Curriculum Through Cooperative Learning, edited by Patricia Winget, 1987, 212 pp.	$20.00
Microcomputers: Critical Consumers and Users Guide, by Mary Britt Vasques and Steve B. Johnson, 1986, 158 pp.	$20.00
Self-Esteem: A Resource Notebook, by Dianna Zapata and Joanne Cohn, 1986, 130 pp.	$10.00
Software Programs and the Learning Disabled Student, by Bruce Ostertag, 1985, 16 pp.	$ 2.50
Special Education Parent Resources Guide, by Beverly Doyle, 1987, 195 pp.	$15.00
Student Study Teams: A Resource Manual for Trainers by Marcie Radius and Pat Lesniak, 1986, 200 pp.	$20.00
Student Study Team Banners, English and Spanish.	$12.00
Tutoring Your Child, English and Spanish Editions, by Joanne Cohn, n.d., 22 pp.	$ 5.50
Working With Adults With Exceptional Needs, by Lynn Carlisle and Trudy Connelly, 1985, 43 pp.	$ 5.50



California's best. For anyone using Cooperative Learning strategies in the classroom, this handbook is a collection of creative, innovative lesson plans that teachers can use to implement Cooperative Learning in their classroom. These outstanding lesson plans represent models of Cooperative Learning that California teachers have developed to integrate the core curriculum into their classrooms. Hundreds of Cooperative Learning lesson plans were submitted for publication—these were selected as ***California's best.***